HELMINTHOLOGICAL ABSTRACTS

INCORPORATING BIBLIOGRAPHY OF HELMINTHOLOGY
FOR THE YEAR 1935.

Vol. IV, Part 5.

470—Acta Instituti et Musei Zoologici Universitatis Atheniensis.

a. PANDAZIS, G.—" Recherches sur la faune helminthologique de la Grèce. I. Les helminthes signalés chez l'homme." I (1/2), 27-32. [1935.]

(470a) Trematode infections in man are rare in Greece and are either *Fasciola hepatica* or *Dicrocoelium lanceatum*. In cats *Opisthorchis felineus* is common in the region of the great lakes in Macedonia. Pandazis has seen the eggs once in human faeces. Although the mollusc *Bulinus contortus* var. *cretica* occurs in southern Greece no endemic case of *Schistosoma haematobium* has yet been reported. Of cestodes, *Echinococcus granulosus* is the most common in Greece. It is estimated that 3% of the population are infected. *Taenia saginata* occurs in 3% of adults and in 2% of children. *T. solium* is rare. *Diphyllobothrium latum* is restricted to the lake region in Macedonia. Two cases are mentioned. *Hymenolepis nana* occurs in 16% of the children and 1% of the adults examined. 16% of the children have eggs of Hymenolepis under the nails. *Hymenolepis diminuta* and *Dipylidium caninum* are rare; one case of each is recorded. In Athens *Ascaris lumbricoides* occurs in 3·6% of the children and 3·4% of adults, while whip-worm is 13·1% in children and 13·9% in adults; in the country the incidence of both these infections is much higher. *Enterobius vermicularis* occurred in 27·7% of children examined and in 5·8% of adults. 24·5% of the infected children had eggs under the nails. The first endemic case of *Ancylostoma duodenale* to be found in Greece is reported from Corfu. R.T.L.

471—Acta Pontificiae Academiae Scientiarum Novi Lyncaei.

a. FRANCHINI, G.—" Su di una microfilaria della rana (*Rana esculenta*)." LXXXVIII, 39-40. [1935.]

b. SATTA, E.—" Identificazione di un focolaio di 'Bilharziosi intestinale' nella Colonia Eritrea." LXXXVIII, p. 297. [1935.]

(471a) Franchini briefly describes and illustrates a short (50μ), ensheathed microfilaria of an unknown species from the blood of a *Rana esculenta*. The adults could not be found. B.G.P.

472—Agriculture and Live-Stock in India.

a. RAO, M. A. N.—" The most practical methods of control of entozoal parasites in India." V (6), 609-614. [1935.]

(472a) In this popular article, written for practical farmers in India, Rao deals with the life-history and control of the more important parasites of stock. D.O.M.

473—American Midland Naturalist.

a. KRULL, W. H.—" Studies on the life history of *Halipegus occidualis* Stafford, 1905." XVI (2), 129-142. [1935.]
b. MacGINITIE, G. E.—" Ecological aspects of a California marine estuary." XVI (5), 629-765. [1935.]

(473a) Krull redescribes *Halipegus occidualis* and also describes the larval stages. Experimentally he has established the snail *Helisoma antrosa* as first intermediate host, and has infected *Cyclops vernalis* and *C. serrulatus* with the cystophorous cercariae released from the snail. The metacercaria is found naturally in the dragonfly, *Libellula incesta*, presumed to be third intermediate host and to be infected as nymphs by eating infected cyclops. The definitive host *Rana clamitans* has been infected by placing a metacercaria in the mouth, its normal habitat. E.M.S.

474—Anales de la Facultad de Medicina de Montevideo.

a. CHIFFLET, A. & ARDAO, H. A.—" Equinococosis peritoneal secundaria." XX, 122-150. [1935.]
b. ARDAO, H. A.—" Quistes hidáticos." XX, 166-169. [1935.]
c. ORIHUELA, J.—" Consideraciones sobre un caso de rotura espontánea de la adventicia de un quiste hidático de hígado seguido de coleperitonitis difusa y de aborto del huevo hidático entero en el peritoneo." XX, 344-353. [1935.]

475—Anales del Instituto de Biología.

a. CABALLERO, E.—" Una nueva especie de trematodo del intestino de *Dermophis mexicanus*." VI (3/4), 185-188. [English summary p. 188.] [1935.]
b. CABALLERO, E.—" Contribución al conocimiento de los nemátodos de las aves de México. I." VI (3/4), 285-289. [English summary p. 289.] [1935.]

(475a) Caballero describes *Cercborchis patonianus* n. sp. in the intestine of *Dermophis mexicanus*, the third species to be recorded from amphibians. B.G.P.

(475b) Caballero describes *Contracaecum hoffmanni* n. sp. from the rectum of *Cochlearius cochlearius*, a wild bird. B.G.P.

476—Annaes da Academia Brasileira de Sciencias.

a. FREITAS, J. F. TEIXEIRA DE & LENT, H.—" Duas novas especies do genero *Capillaria* Zeder, 1800, parasitas de *Metachirops opossum* (Temm.). (Nematoda : Trichuroidea)." VII (4), 351-353. [1935.]
b. TRAVASSOS, L.—" Contribuição ao conhecimento dos Trichostrongylidae." VII (4), 355-360. [1935.]

(476a) Freitas & Lent give brief descriptions of *Capillaria eberthi* n. sp. and *C. longicauda* n. sp., the former from the oesophagus and the latter from the bladder of *Metachirops opossum*. Their relationships with other species are not discussed. B.G.P.

(476b) The Strongylacanthinae, erected by Yorke & Maplestone (1926) as a subfamily of the Ancylostomidae to contain *Strongylacantha* van Beneden, is here transferred by Travassos to the Trichostrongylidae with an amended diagnosis so as to include in addition the following genera : *Molinostrongylus*, *Nycteridostrongylus*, *Torrestrongylus*, *Bradypostrongylus*, and *Tricholeiperia* n.g. The last genus is erected for *T. leiperi* n. sp., from *Trachops cirrhosus*, which is fully described.

Travassos also erects a new subfamily, Spinostrongylinae, to contain *Spinostrongylus* n. g. (for *Histiostrongylus spinosus* Boulenger) and *Histiostrongylus* Molin. The members of the two subfamilies are from Chiroptera and Edentata. B.G.P.

477—Annaes Paulistas de Medicina e Cirurgia.

a. SCHWENCK, J.—" Tropismos e tactismos." XXX (3), 213-227. [1935.]

(477a) In a general discussion on tropisms and tactisms, Schwenck uses as examples numerous types of animal behaviour including the reactions of larval schistosomes, hookworms, *Wuchereria bancrofti*, and *Taenia solium*. B.G.P.

478—Annales d'Anatomie Pathologique et d'Anatomie Normale Médico-Chirurgicale.

a. ROQUES, P. & SOHIER, H.—" Lobe accessoire de la face convex du foie." XII (8), 953-959. [1935.]

479—Annales de Médecine.

a. OUTEIRIÑO, J.—" Des recherches sur la prétendue spécificité des réactions de " Ghedini-Weinberg " et de " Casoni " dans le diagnostic de l'échinococcose humaine." XXXVIII (5), 493-509. [1935.]

(479a) Outeiriño finds that in order to use the Weinberg or Casoni reactions in the diagnosis of human hydatid it is first necessary to establish the absence of intestinal helminths as there are antigenic properties common to all the taenias. Positive reactions, using antigen of intestinal taenias are given by carriers of hydatid cyst and vice versa. P.A.C.

480—Annales du Musée d'Histoire Naturelle de Marseille.

a. JOYEUX, C. & BAER, J. G.—" Étude de quelques Acanthocéphales d'Indochine." XXVII (2), 3-15. [1935.]

(480a) A new genus *Pseudoporrorchis* is erected by Joyeux & Baer within the Acanthocephalan subfamily Centrorhynchinae to contain a new species *P. houdemeri* from *Centropus sinensis intermedius* in Indochina. Four species hitherto assigned to the genus *Echinorhynchus* are also included in the new genus, viz., *E. centropusi*, *E. bulbocaudatus*, *E. rotundatus* and *E. centropi*. *Pseudoporrorchis* closely resembles the genus *Porrorchis* Fukui from which it differs in the morphology of the testicles and bursa. The new species is fully described and figured.

Acanthocephalus bufonis (Shipley 1903) is here redescribed from *Bufo melanosticus* Schn. also in Indochina. The authors believe it may be identical with *A. artatus* found in *Rana tigrina* and *Rana* sp. in the same country. Tables of comparison of the various species of *Pseudoporrorchis* and 4 species of *Acanthocephalus* are included. S.G.S.

481—Annales Scientifiques de l'Université de Jassy.

a. BORCÉA, L. L.—"Nouvelle note sur *Acanthobothrium ponticum* L. Borcéa (n. sp.)." XX, 480-481. [1935.]
b. BORCÉA, L. L.—"Sur la présence du cestode : *Diphyllobothrium stemmacephalum* Cobbold comme parasite chez le marsouin *Phocaena phocaena* de la Mer Noire." XXI, 524-525. [1935.]

482—Annales de la Société Belge de Médecine Tropicale.

a. RODHAIN, J. & VALCKE, G.—"Quatre nouveaux cas de parasitisme par *Onchocerca volvulus* chez l'Européen." XV (3), 361-365. [1935.]

483—Annali di Ottalmologia e Clinica Oculistica.

a. CONTINO, F.—"Considerazioni sul cisticerco della congiuntiva." LXIII (11), 843-854. [1935.]

484—Arbeiten des Tropeninstituts des Volksgesundheits Kommissariat der SSR Armenien.

a. PIRUMOW, C. N.—"10 jährige Tätigkeit des Instituts für tropische Krankheiten des Gesundheitskommissariats der SSR Armenien." II, 11-52. [In Russian : Armenian summary pp. 295-327 ; German summary pp. 357-359.] [1935.]
b. KALANTARIAN, H. W.—"Die Helminthosen der Bevölkerung von SSR Armenien und ihre Dynamik von 1924 bis 1933." II, 234-251. [In Russian : Armenian summary pp. 348-349 ; German summary pp. 376-377.] [1935.]
c. BADALJAN, A. I.—"Versuch der Inficierung weisser Ratten mit *Hymenolepis nana*." II, 252-260. [In Russian : Armenian summary pp. 350-351 ; German summary p. 378.] [1935.]

(484a) An account of the first decade of work at the Armenian Tropical Diseases Institute, given by the Director, includes [in the Russian text] brief details of the helminthic diseases met with locally. B.G.P.

(484b) Of the 21 species of helminths found in man in Armenia during the decade ending 1933, the two hookworms and *Schistosoma haematobium* were from immigrants and are not endemic. The incidence of helminths remains very high, 90·6% of 4,604 children and 96·3% of 5,971 adults being infected. B.G.P.

(484c) Badaljan was able to infect 65% of month-old white rats with *Hymenolepis nana*, 10% of rats 1½ to 3 months old, and no rats older than this. Eggs appeared from 17 to 22 days after infection, but disappeared after a further 8 to 16 days. Drying the eggs for three or four hours at room temperature slightly reduced the incidence. B.G.P.

485—Arbeiten der Turkmenischen Landwirtschaftlichen Hochschule.

a. BADANIN, N. V.—"Ein Versuch quantitativer und qualitativer Feststellung bei Kameelen vorkommender parasitisierender Würmer unter Anwendung der Metode voller helminthologischer Obductionen." I, 3-13. [In Russian: German summary p. 14.] [1935.]

b. BADANIN, N. V.—"Zur Fauna parasitisierender Würmer bei Vögeln, Fam. Cuculidae, in U.S.S.R." I, 15-25. [In Russian: German summary p. 26.] [1935.]

(485a) Badanin gives a systematic description of 15 species of worms, parasitic in the two-humped camel. R.H.H.

(485b) Badanin enumerates and gives systematic descriptions of worms which infest cuckoos. He reports the discovery of a new species, *Ascaridia cuculina*. R.H.H.

486—Archief voor de Koffiecultuur.

a. PFAELTZER, J. W.—"Een onderzoek over de aantasting der koffiewortels door aaltjes." IX (2), 29-38. [1935.]

(486a) Pfaeltzer gives an account of an investigation on the attack of unnamed nematodes [presumably *Anguillulina similis* and *A. pratensis*] on coffee roots. A method is described for demonstrating nematodes in roots. These are carefully washed and then fixed for 30 minutes in strong Flemming solution, washed for 1 hour and then treated for 24 hours in chrom-acetic acid. After a further wash for 24 hours they are placed in aqua regia for 2 hours, which prevents subsequent blackening of the root tissues, and are then mounted in phenol after a final wash in water. Sections showed that the nematodes penetrate the two outer layers of the root cortex and then form tunnels in it parallel to the long axis of the root. In some roots cavities were found in the cortex filled with nematodes. Attack by nematodes caused the root hairs to rot, but they are not invaded. The tunnels formed by the nematodes may be demonstrated by displacing the air from the roots in warm water, soaking them in Indian ink for 30 minutes, followed by treatment with acidified water for 2 hours, which coagulates the ink, and mounting in phenol. T.G.

487—Archiv für Hydrobiologie und Planktonkunde.

a. PESTA, O.—"Kleingewässerstudien in den Ostalpen." XXIX (2), 296-345. [1935.]

(487a) In the course of his ecological study of the pool fauna in the eastern Alps, Pesta records the presence of *Dorylaimus stagnalis*, and also of *Cercaria macrocerca* from *Pisidium obtusale*. B.G.P.

488—Archiv für Klinische Chirurgie.

a. SHIMIDZU, K.—"Ein Operationsfall von Schistosomiasis cerebri." CLXXXII, 401-407. [1935.]

b. GENKIN, I. I.—"Ein Fall von Ascaridenvolvulus, hervorgerufen durch eine enorme Menge von Ascariden." CLXXXII, 642-644. [1935.]

c. TOOLE, H.—"Echinococcus der Glutealmuskeln nach Hundebiss am Gesäss." CLXXXIV, 183-184. [1935.]

d. TOOLE, H.—"Ein Fall von Tubenechinococcus." CLXXXIV, 185-187. [1935.]

489—Archiv für Schiffs- und Tropen-Hygiene.

a. GABRIELJAN, M. J.—"Komplikationen bei der Emetintherapie von seiten des Nervensystems." XXXIX (7), 287-291. [1935.]

(489a) In five cases of Fascioliasis hepatica (and three of amoebiasis), Gabrieljan has used emetine injections and has found that many individuals are intolerant to the drug. Intolerance is shown by the development of central and peripheral nervous symptoms in the form of a polyneuritis, in some cases after a first small injection. B.G.P.

490—Archiv für Wissenschaftliche und Praktische Tierheilkunde.

a. HEIDEGGER, E.—"Das Zentralnervensystem bei parasitären Leber-erkrankungen." LXIX (5), 329-357. [1935.]
b. ENIGK, K.—"Die Ätiologie der Blinddarm-Leberentzündung der Hühnervögel (Blackhead)." LXIX (6), 410-438. [1935.]

(490a) Heidegger has investigated the pathological effects of liver-hydatid and liver-fluke upon the central nervous system of cattle, sheep, pigs and one horse. Toxic changes in the C.N.S., which take the form of a typical glia-reaction, probably follow upon cirrhotic changes in the liver, where the normal detoxicating function is impaired by destruction of liver parenchyma. Detoxication is then undertaken by the glial elements of the C.N.S. The toxins may be of parasitic origin, or may represent products of destruction of liver parenchyma. B.G.P.

(490b) Contrary to general opinion, Enigk discounts the importance of *Heterakis gallinae* in the spread of Blackhead disease in gallinaceous birds. The causative organism lives normally as a saprophyte in the gut and only when the mucosa is damaged can it become pathogenic. Such damage can be caused by the entry of larvae of *H. gallinae* or by a variety of other factors. P.A.C.

491—Archives de la Société des Sciences Médicales et Biologiques de Montpellier.

a. HARANT.—"Une statistique locale d'examens parasitologiques." XVI, 197-200. [1935.]
b. JEANBRAU, E., TRUC, E. & HÉRAN, J.—"Kystes hydatiques du rein ouverts dans le bassinet." XVI, 346-350. [1935.]

492—Archivio Italiano delle Malattie dell'Apparato Digerente.

a. DIENA, G.—"Su di un caso di schistosomia intestinale." IV, 580-584. [1935.]

493—Archivio di Radiologia.

a. VERCESI, R.—"Rilievi radiomorfologici sull'idatide polmonare." XI, 36-47. [1935.]

494—Archivos do Instituto Biologico.

a. PEREIRA, C.—"Os Oxyurata parasitos de Lacertilia do Nordeste Brasileiro." VI, 5-27. [English summary pp. 25-26.] [1935.]
b. VAZ, Z.—"Sobre a pretensa validez de *Syngamus nasicola* — Preseça do *Syngamus laryngeus* nas fossas nasaes de carneiros do Brasil." VI, 35-39. [English summary pp. 38-39.] [1935.]

c. VAZ, Z.—" Lesões produzidas no estomago de cobras por um novo nematoide —*Ophidascaris trichuriformis* n. sp." VI, 41-44. [English summary p. 44.] [1935.]

d. VAZ, Z.—" Adaptação ao porco domestico do *Stichorchis giganteus*, parasita de porcos selvagens. Redescripção." VI, 45-52. [English summary p. 51.] [1935.]

e. PEREIRA, C.—" Ascaridata e Spirurata parasitos de peixes do Nordeste Brasileiro." VI, 53-62. [English summary, p. 62.] [1935.]

f. VAZ, Z.—" Sarna do porco do Matto por *Sarcoptes scabiei suis*, parasita do porco domestico." VI, 69-70. [English summary p. 70.] [1935.]

(494a) Pereira gives illustrated descriptions of the oxyuroid nematodes found parasitizing 34 of 73 lizards collected in the north-east of Brazil. The new species included are *Pharyngodon travassosi* from *Ameiva* sp., *P. cesarpintoi* from *Cnemidophorus lemniscatus*, and *Spinicauda amarali* from *Ameiva ameiva*. The Pharyngodonidae and Spinicaudinae are re-defined, and a new family, Ozolaimidae, is erected for oxyuroids in which the dorsal lip is absent. B.G.P.

(494b) Vaz records the presence of a *Syngamus*, indistinguishable from *S. laryngeus* of cattle, in the nasal cavities of sheep in Brazil. Finding the disposition of the buccal ribs and the presence or absence of spicules to be variable characters, he denies the validity of *S. nasicola*, upheld by Buckley in 1934. B.G.P.

(494c) Vaz describes *Ophidascaris trichuriformis* n. sp., causing ulcerations affecting all the layers of the stomach in the snakes: *Liophis miliaris*, *Crotalus terrificus*, and *Xenodon merremi* in S. Paulo, Brazil. Both parasite and lesions are illustrated. B.G.P.

(494d) *Stichorchis giganteus*, originally described by Diesing from material collected by Natterer in *Dicotyles* spp., is here redescribed and figured by Vaz from material found in the caecum of the domestic pig in Brazil. B.G.P.

(494e) Pereira gives illustrated descriptions of new species of ascarids from marine fish and spirurids from fresh-water fish in the north-east of Brazil. The new forms are *Porrocaecum rochalimai* n. sp., *Iheringascaris iheringascaris* n. g., n. sp., *Procamallanus wrighti* n. sp., *P. barroslimai* n. sp., and *P. fariasi* n. sp. In most cases the fish are designated by popular names. B.G.P.

(494f) Introducing his note on *Sarcoptes* on a pig, Vaz refers to the danger of wild-animal parasites becoming adapted to domesticated hosts, in which they often cause severe damage. Examples are *Stichorchis giganteus* in pig, *Fascioloides magna* in cattle, and *Nanophyetus salmincola* in dog. B.G.P.

495—Archivos de Medicina Infantil.

a. KOURÍ, P., BASNUEVO, J. G. & ARENAS, R.—" Una nueva aplicación de la emetina en parasitología." IV, 21-23. [1935.]

(495a) [For abstract of this paper see Helm. Abs., Vol. III, No. 338a.]

496—Archivos de Medicina Interna.

a. KOURÍ, P., BASNUEVO, J. G. & FERMOSELLE BACARDÍ, J.—" Poder fasciolicida del clorhidrato de emetina." I, 145-146. [1935.]

497—Archivos de la Sociedad de Biología de Montevideo.

a. CALZADA, V.—" Sobre los helmintos que parasitan los animales del Uruguay." VI (1), 32-50. [1935.]
b. CALZADA, V.—" Sobre *Rhabditis* (Ascaroidea) (formas libres)." VI (1), 74-77. [1935.]

(497a) Calzada gives illustrated descriptions of the following nematodes which are recorded from Uruguay for the first time: *Metastrongylus apri*, *M. brevivaginatus*, *Nematodirus filicollis*, *N. spathiger* and *Trichostrongylus extenuatus*. B.G.P.

498—Arquivos de Cirurgia e Ortopedia.

a. GUTIÉRREZ, A. & RUIZ, V.—" Consideraciones sobre 3 casos de hidatidosis genital femenina." II, 275-283. [1935.]

499—Boletín de la Academia de Ciencias Exactas, Físicas y Naturales.

a. LÓPEZ-NEYRA, C. R.—" Sobre algunos géneros de Dilepididae." I (3), 9. [1935.]

(499a) In what appears to be a summary, or Secretary's Abstract, López-Neyra transfers *Parvirostrum magnisomum* Southwell to *Taufikia*, which genus is moved from the Anoplocephalinae to the Dilepidinae. *Gidhaia* Johri falls under the synonymy of *Taufikia*. B.G.P.

500—Boletín de la Academia Nacional de Medicina de Buenos Aires.

a. GREENWAY, D.—" Infestaciones múltiples por *Taenia saginata*." pp. 961-966. [1935.]

501—Boletín del Instituto de Clínica Quirúrgica.

a. NIÑO, F. L.—" Triquinosis experimental en la rata." XI (97/99), 336-350. [1935.]
b. IVANISSEVICH, O. & INTROZZI, A. S.—" Diagnóstico de la hidatidosis ósea." XI (97/99), 373-378. [1935.]

(501a) Niño traces the life-history of *Trichinella spiralis* in rats in a series of experiments lasting 84 days. He has not found adults below the *muscularis mucosae*, and he finds that the larvae encyst within muscle fibres, the cyst having three layers. B.G.P.

502—Boletin Mensual de la Clinica de la Asociación de Damas de La Covadonga.

a. KOURÍ, P., SILVEIRA, R. & ANIDO, H.—" Un nuevo caso autoctono de fasciolosis hepática humana en Cuba." II (4), 202-211. [1935.]
b. KOURÍ, P. & FRADE, A. DEL.—" La clonorchiasis en la ciudad de la Habana." II (7), 235-248. [English summary p. 247.] [1935.]
c. CALVÓ FONSECA, R., KOURÍ, P. & BASNUEVO, J. G.—" Porcentaje y distribución geográfica del parasitismo intestinal en Cuba. Provincia de Pinar del Rio. Pueblo: Consolación del Sur." II (9), 272-280. [1935.]
d. KOURÍ, P., CALVÓ FONSECA, R. & BASNUEVO, J. G.—" Porcentaje y distribución geográfica del parasitismo intestinal en Cuba. Provincia de la Habana: ciudad de la Habana: Colonia Infantil de Tiscornia (año 1931)." II (11), 303-305. [1935.]

(502b) Of 100 Chinese immigrants in the city of Havana, all originating from Canton, 49 were found to be infected with *Clonorchis sinensis* by Kouri & Del Frade. Efficient intermediaries are apparently not present in Cuba, but the authors list the local molluscs and fishes most nearly related to the known Asiatic intermediaries. B.G.P.

503—Boletín de la Sociedad Española de Historia Natural.

a. LÓPEZ-NEYRA, C. R.—" Sobre una tenia crítica del alcaraván." XXXV (3/4), 203-216. [1935.]

(503a) López-Neyra describes and figures *Icterotaenia delachauxi* var. *mesacanta* n. var., from *Oedicnemus oedicnemus*, intermediate between the definitive species found in Africa and the European form *Taenia coronata*. Both species should be transferred to *Choanotaenia*, as also should 11 species of *Anomotaenia*, which genus is suppressed. He erects Monopylidinae n. subf., in the Dilepididae, for *Monopylidium* and transfers *M. unicoronatum* to *Choanofuhrmannia*, a genus to be formally proposed in an article shortly to be published. Three other species of *Paricterotaenia* are also discussed. B.G.P.

504—Boletines y Trabajos de la Sociedad de Cirugía de Buenos Aires.

a. MAZZINI, O. F.—" Cierre sin drenaje en los quistes hidáticos del abdomen con calcificación de la periquística." XIX (27), 1066-1073. [1935.]
b. SUÁREZ, V.—" A propósito de ' Cierre sin drenaje en los quistes hidáticos del abdomen con calcificación de la periquística '." XIX (28), 1081-1086. [1935.]

505—Bollettino delle Scienze Mediche. Bologna.

a. GIROLAMI, M.—" La lotta contro la schistosomiasi (Bilharziosi) in Egitto." CVII, 335-360. [1935.]

506—Botany and Zoology.

a. KOBAYASHI, H. & SYÔGAKI, Y.—" On *Bothridium pythonis* Blainville, a cestode from *Python reticulatus*." III (6), 1135-1140. [In Japanese.] [1935.]
b. OKADA, S.—" On a parasitic nematode in the air-bladder of the salmon." III (8), 1451-1456. [In Japanese.] [1935.]
c. KOBAYASHI, H.—" On the genitalia of Acanthocephala." III (9), 1627-1632. [In Japanese : English summary p. 1631.] [1935.]
d. KOIDZUMI, M.—" Experimental studies on resistance for after-infection of intestinal nematodes." III (11), 1909-1918. [In Japanese.] [1935.]
e. KOBAYASHI, H.—" Observation on *Caridinicola indica* a Temnocephalan parasite of *Xiphocaridina compressa* in Lake Biwa." III (12), 2124-2128. [In Japanese.] [1935.]
f. FUJITA, T.—" On the parasites of fishes." III (12), 2139-2148. [In Japanese.] [1935.]

507—Brasil-Medico.

a. MACIEL, H.—" Aspectos da esquistosomose intestinal, no Brasil." XLIX (31), 685-692. [1935.]
b. SAMPAIO TAVARES, A.—" Aspectos anatomo-clinicos da schistosomose." XLIX (36), p. 801 ; (37) p. 823. [1935.]

508—British Journal of Urology.

a. CAWSTON, F. G.—" The treatment of bilharzia infection by the urologist." VII, 333-335. [1935.]

509—Bronchoscopie, Oesophagoscopie et Gastroscopie.

a. PIAGGIO-BLANCO, R. A. & GARCÍA CAPURRO, F.—" Grosses bronchiectasies ayant régressé dans un kyste hydatique pulmonaire incomplètement vidé. Intérêt de la bronchographie lipiodolée." pp. 214-224. [1935.]

510—Buletinul Societăţii de Ştiinţe din Cluj.

a. EPURE, E. X.—" L'anatomie des organes génitaux des *Ascaris vitulorum* Goeze. (L'*Ascaris vitulorum* Goeze est une espèce distincte et non pas une espèce physiologique)." VIII (2), 267-271. [1935.]

(510a) Epure finds that *Ascaris vitulorum* is a valid species. It is more translucent than *A. lumbricoides*, the vulva is at a point 1/7 of the body length from the mouth, the vagina is twice as long, and the uteri half as long as in *A. lumbricoides*. The male genitalia occupy nearly the whole length of the body cavity. B.G.P.

511—Bulletin de l'Académie Royale de Belgique. Classe des Sciences.

a. WAELE, A. DE.—" Recherches sur les migrations des Cestodes. Cinquième note. Étude de l'infection de l'hôte définitif par la larve hydatique." Ser. 5, XXI (6), 628-641. [1935.]

(511a) De Waele finds that hydatid fluid is free from oxygen, by the pyrogallic acid test. Evagination of scolices is a function of temperature and is independent of such factors as *p*H, presence of bile salts, etc. Scolices survive for two or three hours in artificial gastric juice, but are ultimately digested by it. Successive immersion in gastric and intestinal juices leads to immediate digestion. Thus, only scolices protected by the brood-capsule during passage through the stomach can survive in the intestine. Since the numerous hydatids met with in the Ghent area have all been unilocular, de Waele considers this a geographical argument in favour of the specific identity of the alveolar type. B.G.P.

512—Bulletin de l'Académie Vétérinarie de France.

a. URBAIN, A. & BULLIER, P.—" Un cas de cénurose conjonctive chez un gélada (*Theropithecus gelada* Ruppel)." VIII (6), 322-324. [1935.]

b. ORLOFF, I. W.—" Le traitement de la dictyocaulose des moutons et des veaux par la méthode des injections intratrachéales en U.R.S.S." VIII (7), 390-401. [1935.]

(512a) [This paper appears also in Bull. Mus. Hist. Nat. See below No. 516a.]

(512b) Orloff recommends intratracheal injections of iodine against *Dictyocaulus* in sheep and cattle. Since the parasite frequents the posterior lobules of the lungs, the injection is best made with the animal held on its back in a special cradle, the head being slightly raised. Experiments made by various workers in Russia on several thousands of infected sheep and

cattle, show that the iodine is equally effective in the form of the 10% tincture (1 c.c., with glycerine 50 c.c. and distilled water 150 c.c.) or in Lugol's solution (iodine 1, potassium iodide 1·5, distilled water 100, diluted for use 1 : 400 with tap water), but the latter is less expensive. The solutions are usually given in one or two doses of up to 15 c.c. for sheep and up to 50 c.c. for cattle. B.G.P.

513—Bulletin. Canterbury Agricultural College. New Zealand.

a. LESLIE, A.—"Rickets of young sheep in New Zealand, with particular reference to management, feeding and worm control." 8 pp. [1935.]

(513a) Helminth infection enters into the subject of rickets in sheep, according to Leslie, as a potent factor in predisposition. A survey of 15 Canterbury farms showed that as the mortality from parasitic diseases increased there was a corresponding increase in the incidence of rickets.

J.W.G.L.

514—Bulletin International de l'Académie Polonaise des Sciences et des Lettres, Classe des Sciences Mathématiques et Naturelles, Série B : Sciences Naturelles, (II).

a. MARKOWSKI, S.—"Über den Entwicklungszyklus von *Bothriocephalus scorpii* (Müller 1776)." 1935 (1/2), 1-17. [1935.]
b. WIŚNIEWSKI, L. W.—"*Cercaria dubia* sp. n. und deren weitere Entwicklung in *Herpobdella atomaria*." 1935 (1/2), 19-35. [1935.]
c. MARKOWSKI, S.—"Einfluss der Milieuveränderungen auf die Entwicklung der Eier von *Bothriocephalus scorpii* (Müller 1776)." 1935 (3/5), 49-58. [1935.]
d. MARKOWSKI, S.—"Die parasitischen Würmer von *Gobius minutus* Pall. des polnischen Balticums." 1935 (6/7), 251-260. [1935.]

(514a) Markowski has traced the life-history of *Bothriocephalus scorpii* (= *B. bipunctatus*) which he found adult in the intestine of 97% of the marine fish *Rhombus maximus*. The first intermediary is the copepod *Eurytemora hirundo*, and the second is the fish *Gobius minutus*, upon which *R. maximus* feeds, and in which the plerocercoids occur in the stomach and intestine but not in the body cavity or musculature. Differentiation of the scolex, strobilisation, and the development of genital rudiments occur in the plerocercoids, but no sexually mature forms were found among over 1,000 specimens from *G. minutus*. The coracidium, procercoid and plerocercoid are described and figured. B.G.P.

(514b) Wiśniewski describes a new species of furcocercous cercaria, *C. dubia*, from *Physa fontinalis*. As second intermediaries for this species, the leech *Herpobdella atomaria* and (to a less extent) *Physa fontinalis* were experimentally implicated. The mollusc *Coretus corneus* was found naturally infected with what is probably the same species. In these second intermediaries a Tetracotyle develops, and this stage is described and figured. B.G.P.

(514c) Markowski has studied the influence of various concentrations of NaCl on the development of the eggs of *Bothriocephalus scorpii* and finds that development proceeds normally at 0·7 to 46·66‰. Optimum conditions range from 4·66 to 35‰. R.T.L.

(514d) In *Gobius minutus*, caught near the port of Hel, Markowski has found 9 species of helminths of which one is named as new without any description or other indication. R.T.L.

515—Bulletins et Mémoires de la Société de Radiologie Médicale de France.

a. TILLIER, LE GENISSEL & GOINARD.—" Étude radiologique de l'hydatidose." XXIII (221), 409-410. [1935.]
b. DUBOUCHER, H. & BLONDEAU, A.—" Un cas d'opacités arrondies multiples du thorax." XXIII (221), 436-441. [1935.]
c. DUBOUCHER, H., BLONDEAU, A. & TILLIER, R.—" Sur l'évolution d'un cas d'échinococcose vertébrale." XXIII (221), 465-468. [1935.]

516—Bulletin du Musée d'Histoire Naturelle.

a. URBAIN, A. & BULLIER, P.—" Un cas de cénurose conjonctive chez un Gélada (*Theropithecus gelada* Ruppel)." Ser. 2, VII (4), 245-246. [1935.]

(516a) [This paper appears also in Bull. Acad. Vét. France. See above No. 512a.]

517—Bulletin of the Ophthalmological Society of Egypt.

a. EL-TOBGY, A. F. & WILSON, R. P.—" The ocular complications of the endemic diseases in Egypt." XXVIII, 1-8. [1935.]
b. SOLIMAN, A. M.—" Effect of endemic diseases on the eye." XXVIII, 9-11. [1935.]

518—Bulletin Ornithologique Romand.

a. FUHRMANN, O.—" Les Ténias des oiseaux." I (4), 114-117. [1935.]

(518a) Fuhrmann shows how cestode population can be utilized to prove or disprove relationships of various groups of birds, and even, in the case of the African and South American ostriches, to lend support to the theory of the separation of these two continents. E.M.S.

519—Bulletin of the Puerto Rico Agricultural Experiment Station.

a. VAN VOLKENBERG, H. L.—" Parasites and parasitic diseases of horses in Puerto Rico." No. 37, 19 pp. [1935.]

(519a) Van Volkenberg gives a popular description of the helminth parasites of the horse occurring in Puerto Rico. Control, treatment and local distribution are discussed. J.W.G.L.

520—Bulletin of the San Juan de Dios Hospital of Manila.

a. NIEVA, D. E.—" Epileptiform convulsions probably due to schistosomiasis. (Report of a case)." IX (7), 234-237. [1935.]

521—Bulletin de la Société Belge d'Ophtalmologie.

a. STROOBANTS, C.—" Filaire sous-conjonctivale de l'oeil." No. 71, pp. 213-215. [1935.]

522—Bulletin de la Société d'Études Scientifiques d'Angers.

a. BRETON,—"Les vers rouges des Gallinacés." LXIV, 33-36. [1935.]

(522a) In a popular article Breton considers the life history of *Syngamus trachea* and believes it to be direct. He recommends a course of pyrethrum as an anthelmintic to kill the larvae in the intestine, before they have time to migrate to the lungs. P.A.C.

523—Bulletin de la Société de Pathologie Exotique.

a. MONTESTRUC, E. & BERTRAND, C.—"A propos d'un cas de lymphangite tropicale." XXVIII (7), 612-614. [1935.]

524—Bulletins de la Société de Pédiatrie de Paris.

a. FÈVRE, M. & PETIT, P.—"Deux cas de kyste hydatique du foie chez l'enfant, dont un avec rupture." XXXIII, 597-603. [1935.]
b. ARMAND-DELILLE, P., LESTOCQUOIS, C. & BOYER, J.—"Un cas d'ascaridiose massive et persistante avec anémie et éosinophilie chez un enfant de 18 mois." XXXIII, 703-707. [1935.]
c. GIRAUD, P., SALMON & JOUVE.—"Kyste hydatique du rein chez un enfant de 10 ans." XXXIII, 718-724. [1935.]

525—Bulletin de la Société Zoologique de France.

a. DORIER, A.—"Un nouveau *Gordius* d'Indochine: *Chordodes joyeuxi* n. sp." LX (3/4), 321-324. [1935.]
b. JOYEUX, C. & BAER, J. G.—"Notices Helminthologiques." LX (6), 482-501. [1935.]

(525b) Joyeux & Baer present four notes on cestodes. (i) *Taenia laticollis* from various carnivores is re-described and shown to be distinct from *T. taeniaeformis*. (ii) Witenberg's recent revision of *Mesocestoides* (see Helm. Abs. Vol. III, No. 302a), reducing 24 species to 3, had suppressed the type *M. ambiguus*; the authors find that this is a valid species and redescribe it. (iii) The two species from cormorants: *Taenia scolecina* Rud., 1819 and *Dilepis scolecina* J. & B., 1928 are found, on comparison, to be distinct species of *Paradilepis*. *P. scolecina* (Rud.) has as synonym the type *P. duboisi* Hsü, while *D. scolecina* falls into the synonymy of *Oligorchis delachauxi* as *P. delachauxi* (Fuhrm.). The cestodes erroneously ascribed in 1930 to *Dilepis delachauxi* are renamed *Paradilepis macracantha* nom. nov. (iv) *Disculiceps* and Disculicipitidae are proposed as new names for *Discocephalum* and Discocephalidae, both preoccupied. *Bothridium pithonis* var. *minor* J. & B. should be dated 1928, and not 1926 as it is in J. & Houdemer, 1928. B.G.P.

526—Bulletin of the West Virginia University Agricultural Experiment Station.

a. RIETZ, J. H.—"Copper sulphate as an anthelmintic for gastro-intestinal parasites of sheep." No. 264, 20 pp. [1935.]

(526a) Rietz found that the treatment of sheep at intervals of 21 days with a 1½% solution of copper sulphate effectively reduced the gastro-intestinal

nematodes and tapeworms. Fasting the animals for 24 hours before drenching increased the efficiency of the anthelmintic and apparently assisted its passage directly to the abomasum. Good feeding was found to be an essential factor in successful treatment. The paper contains numerous tables giving egg-counts taken at different stages during the experiments and also the results of post-mortem examination. D.O.M.

527—Campo. Agricultura, Industria, Commercio. Rio de Janeiro.

a. PINTO, C. & ALMEIDA, J. LINS DE.—" Sinopse dos helmintos animais domesticos do Brasil." VI (8), 54-63. [1935.]
b. PINTO, C.—" Variações morfologicas observadas no *Eurytrema fastosum* (Kossack, 1910). Trematoda—Dicrocoelidae." VI (10), 50-52. [1935.]
c. PINTO, C.—" Contribuição ao estudo do *Stephanurus dentatus* Diesing, 1839, agente etiologico do estefanurose dos suinos. Strongylata. Stephanuridae." VI (11), 27-30. [1935.]
d. TRAVASSOS, L.—" Sobre um novo Trichostrongylideo parasito de Columbiformes." VI (12), p. 54. [1935.]

(527a) Pinto & Almeida catalogue the more common helminth parasites of domestic stock, both avian and mammalian, in Brazil, noting their frequency and importance as disease producers. Lesions are often photographed. Geographical distribution within Brazil is considered. P.A.C.

(527b) Pinto describes some variations in the genitalia of *Eurytrema fastosum* from the cat. The testes may be smooth in outline or constricted, as may be the ovary. The cirrus sac shows differences in size while the vitelline glands are frequently asymmetrical and in one case had only developed on one side of the worm. P.A.C.

(527d) Travassos describes *Ornithonema mensoris* n. g., n. sp., a trichostrongylid parasite of pigeons in Brazil. It can be recognized by the possession, in the male, of a bursa which has asymmetrical lateral lobes. It is related to *Ornithostrongylus* and *Lutznema*. P.A.C.

528—Capita Zoologica.

a. ALLGÉN, C.—" Die freilebenden Nematoden des Öresunds." VI (3), 1-192. [1935.]

(528a) Allgén deals with free-living nematodes collected during 1928-29 from the Öresund, i.e., the region of the Cattegat which separates Zaeland (Denmark) from the southern part of Sweden. Following a brief introduction and a list of 47 collecting stations, the author sets out the findings systematically under orders, families, genera and species. The bulk of the paper is taken up with descriptions, etc., of the 221 species found, which include 45 n. spp. and the following new genera: *Heterocyatholaimus*, *Filipjeviella*, *Nijhoffia* and *Alaimonemella*. The work is completed with tables of distribution, discussions on various bionomical aspects of the findings, a map and 10 plates of line drawings. T.G.

529—China Journal.

a. HAUGHWOUT, F. G.—" Observations on certain intestinal diseases in the foreign population of Shanghai." XXII (6), 341-349. [1935.]

(529a) In 595 individuals of European races living in good circumstances and residing in thoroughly sanitary surroundings in Shanghai, eggs of *Ascaris lumbricoides* occurred in 69, of *Trichuris trichiura* in 59, of hookworm in 5 and of *Clonorchis sinensis* in 1. R.T.L.

530—Circular. Tennessee Agricultural Experiment Station.

a. WHITTLE, W. O. & DRAIN, B. D.—"The root-knot nematode in Tennessee: its prevalence and suggestions for control." No. 54, 8 pp. [1935.]

531—Clinica Veterinaria. Milano.

a. CATTANEO, F.—"A proposito della cisticercosi bovina. È proprio l'esofago la sede di predilezione del Cisticercus bovis?" LVIII (1), 53-58. [1935.]
b. DE-LEIDI, G.—"A proposito della cisticercosi bovina." LVIII (6), 488-489. [1935.]
c. POSTIGLIONE, E.—"Il servizio veterinario e le più gravi malattie diffusibili del bestiame nelle nostre Colonie dell'Africa Orientale." LVIII (8), 614-690. [1935.]
d. SPENA, A.—"Sulla ascaridiosi dei polli." LVIII (11), 863-869. [1935.]

(531c) In this extensive account by Postiglione of the major diseases confronting the Veterinary Service in Italian East Africa, there appears a section (pp. 674-677) dealing with a serious disease of camels due to an intestinal infestation with *Anthostrongylus somalilensis*, a skin-penetrating trichostrongyle. B.G.P.

(531d) Spena is of the opinion that *Heterakis* spp. may be a cause of mortality among gallinaceous birds either by rupturing the gut wall or by causing large nodules. The important species concerned are *H. papillosa*, *H. inflexa*, *H. compar* and *H. differens*. P.A.C.

532—Clujul Medical.

a. RĂDULET, V.—[Case of pulmonary hydatid cyst with extraordinary roentgenologic aspect.] XVI, 654-655. [1935.]

533—Compte Rendu Mensuel des Séances de la Classe des Sciences Mathématiques et Naturelles. Académie Polonaise des Sciences et des Lettres. Cracovie.

a. WIŚNIEWSKI, L. W.—"La *Cercaria dubia* sp. n. et son évolution dans l'*Herpobdella atomaria*." No. 1, p. 5. [1935.]
b. MARKOWSKI, S.—"Sur le cycle évolutif du *Bothriocephalus scorpii* (Müller, 1776)." No. 1, p. 6. [1935.]
c. MARKOWSKI, S.—"L'influence des changements du milieu sur le développement des oeufs de *Bothriocephalus scorpii* (Müller, 1776)." No. 4, p. 8. [1935.]
d. MARKOWSKI, S.—"Les vers parasites de *Gobius minutus* Pall. de la Baltique polonaise." No. 7, p. 8. [1935.]

(533a, b, c, d.) [For abstracts of these papers see above Nos. 514a, b, c, d.]

534—Cornell Veterinarian.

a. FROST, J. N. & ERRINGTON, B. J.—" Fistulous withers and poll evil." XXV (2), 177-183. [1935.]
b. MILKS, H. J.—" Unusual case of whipworms." XXV (4), p. 386. [1935.]

(534a) Frost & Errington refer only incidentally to *Onchocerca cervicalis* ; their treatment for poll evil and fistulous withers is given. J.W.G.L.

(534b) Milks describes a case of whipworms in which a two year old bitch was in excellent condition and appeared normal except for diarrhoea. None of the usual anthelmintics were effective. At autopsy the colon and anterior part of the rectum were much dilated and packed full of whipworms. J.W.G.L.

535—Crónica Medico-Quirúrgica de la Habana.

a. CALVO FONSECA, R., KOURÍ, P. & BASNUEVO J. G.—" Porcentaje y distribución geográfica del parasitismo intestinal en Cuba. Provincia de Pinar del Río. Pueblo : San Juan y Martínez." LXI, 450-457. [1935.]
b. KOURI, P., SELLEK AZZI, A. & RIVERA, R.—" Sobre el tratamiento de la strongyloidosis por el violeta de genciana." LXI, 548-557. [1935.]
c. CALVO FONSECA, R., KOURÍ, P. & BASNUEVO, J. G.—" Porcentaje y distribución geográfica del parasitismo intestinal en Cuba." LXI, 577-585. [1935.]

536—Deutsche Zuckerindustrie.

a. GOFFART, H.—" Zum Anbau von Raps, Rübsen und Senf auf Rübennematodenböden." Nr. 49, I.Beilage, pp. 1041-1042. [1935.]

(536a) Goffart records experiments to determine the effects of rape, turnip-rape and mustard on the cyst content of " beet-sick " land. Autumn-sown rape and turnip-rape were found to produce one generation of nematodes in certain districts before the onset of winter ; many larvae which entered the roots in autumn hibernated and completed their development in spring. From 23 to 52 days elapsed between autumn sowing and the appearance of cysts, the time varying with temperature. A second generation of the nematode developed on these hosts in the spring and it is concluded that their cultivation is definitely injurious on " beet-sick " land. Mustard was found to increase the cyst content of soil rather less than rape and turnip-rape. M.J.T.

537—Difesa Sociale.

a. RAVICINI, S.—" Di alcune malattie gravi da parassiti animali, frequenti nelle regioni africane. Parte Terza." XIV (11), 684-694. [1935.]

(537a) In the third part of his article on common parasitic diseases of man in Africa, Ravicini briefly reviews the helminthic diseases. As he says, he has nothing new to expound. B.G.P.

538—Écho Médical du Nord.

a. DE TROY.—" Filaria loa sous-conjonctivale." IV (43), 741-742. [1935.]

539—Ergebnisse der Gesamten Medizin.

a. BRÜNING, H.—" Die Wurmkrankheiten des Kindes." XX, 1-32. [1935.]

540—Farming in South Africa.

a. MÖNNIG, H. O.—"Bankrupt worms in Persian sheep." X (115), p. 419. [1935.]

(540a) Mönnig gives a popular description of the life cycle, symptoms and treatment of Trichostrongylus infections in sheep which are of wide occurrence in South Africa. He points out that much more damage is done to Persian sheep than to Merino sheep and that treatment of sheep infected with Trichostrongylus species with arsenical preparations is dangerous, but recommends a mixture of copper sulphate and nicotine, for which the following doses are given :—for ages 1 to 3 months, $\frac{1}{2}$ to $\frac{3}{4}$ oz. ; 3 to 6 months, $\frac{3}{4}$ to 1 oz. ; 6 to 12 months 1 to $1\frac{1}{2}$ oz. ; over 12 months, $1\frac{1}{2}$ to 2 oz., depending on condition in each case. The mixture is made up with 1 oz. copper sulphate and 1 fluid oz. tobacco extract (40% nicotine) in 3 pints water. J.W.G.L.

541—Finska Läkaresällskapets Handlingar.

a. TÖTTERMAN, G.—"Om benmärgspunktion, med särskilt beaktande av benmärgen vid den perniciösa botriocefalusanemin." LXXVII, 547-557. [1935.]

542—Fischereizeitung.

a. WILDE, H.—"Der Schleiendactylogyrus (*Dactylogyrus macracanthus*) und die Schädigung der Schleienkieme durch diesen Parasiten." XXXVIII. [1935.]

543—Folia Clinica et Biologica.

a. PESSÔA, S. B.—"Infestação natural da pulga do rato *Ctenopsyllus musculi* pelo cysticercoide da *Hymenolepis diminuta*." VII (3), 101-102. [1935.]

(543a) Pessôa has found a rat flea *Ctenopsyllus musculi* naturally infested in the body cavity with a fully developed, viable cysticercoid of *Hymenolepis diminuta*. In view of this discovery he considers that the possibility of fleas or other intermediate hosts as important vectors should not be overlooked. P.A.C.

544—Folia Zoologica et Hydrobiologica.

a. ALLGÉN, C. A.—"Ueber einige freilebende marine Nematoden aus den Sammlungen des Hamburger Zoologischen Museum." VIII (1), 25-33. [1935.]
b. ALLGÉN, C.—"Das Männchen des *Actinolaimus africanus* Filipjev." VIII (1), 33-35. [1935.]
c. STRAND, E.—"Miscellanea nomenclatorica zoologica et palaeontologica. VIII." VIII (1), p. 176. [1935.]

(544a) Allgén has examined a number of small collections of marine nematodes housed at the Hamburg Zoological Museum. All the species identified are already known to science except in the case of *Viscosia strandi* n. sp., one young male and one larva of which were obtained in a collection from the Murmansk coast. T.G.

(544b) In a collection of nematodes from Zanzibar at the Hamburg Zoological Museum, Allgén found for the first time males of *Actinolaimus africanus* Filipjev, 1929, females only of which had been known previously. A description is given with measurements and proportions. T.G.

(544c) Strand amends *Bolbocephalus* Dubois, 1934 to *Bolbocephalodes* nom. nov., giving the family name Bolbocephalodidae (Trematoda). T.G.

545—Frankfurter Zeitschrift für Pathologie.

a. LÖRINCZ, F.—"Anchylostomiasis sine morbo." XLVIII (3), 327-334. [1935.]

546—Gaceta Médica de Caracas.

a. CARVALLO, T.—"Anotaciones criticas al estudio 'Obstrucción intestinal causada por el *Ascaris lumbricoides*' del Dr. J. R. Hernández d'Empaire." XLII (17), 264-266. [1935.]
b. RAFAEL RÍSQUEZ, J.—"Parasitismo por *Ascaris lumbricoides* verificado en Caracas (en 25,000 análisis)." XLII (22), p. 347. [1935.]
c. HERNÁNDEZ D'EMPAIRE, J. R.—"Obstrucción intestinal causada por Ascaris." XLII (24), 369-373. [1935.]

547—Gazette Médicale de France.

a. PIÉRI, J.—"Diagnostic des diarrhées parasitaires." pp. 653-658. [1935.]

548—Gazzetta Internazionale di Medicina e Chirurgia.

a. D'ALESSANDRIA, E.—"Il ricambio basale nelle anemie da anchilostoma duodenale." XLV, 545-550. [1935.]

549—Giornale Italiano di Malattie Esotiche e Tropicali ed Igiene Coloniale.

a. IMPALLOMENI, R.—"Il parassitismo intestinale in Cirenaica." VIII (5), 114-120. [1935.]
b. AMICIS, A. DE.—"Un caso autoctono di filariasi da *Filaria bancrofti* osservato in Italia." VIII (7), 167-169. [1935.]

550—Indian Journal of Pediatrics.

a. BANERJEA, J. C.—"Treatment of hookworm anaemia with massive doses of iron." II, 314-317. [1935.]

551—Indian Veterinary Journal.

a. HAJI, C. S. G.—"Preliminary notes on a disease of sheep and goats locally known as 'Phet or Pitto'." XII (1), 18-21. [1935.]

(551a) Haji describes the symptoms and post-mortem findings of a disease of sheep and goats in India locally known as "phet" or "pitto" occurring in low lying marshy lands. The disease is considered to be due to helminths and a list of the species recovered at autopsy is given. Mortality is 90%. Treatment on a small scale with Danistol capsules met with good results. J.W.G.L.

552—Industria Saccarifera Italiana.

a. MUNERATI, O.—"La barbabietola quale specie ospite della *Heterodera marioni* (sin. *H. radicicola*)." XXVIII (2), 58-61. [1935.]

(552a) Munerati describes a wide series of polarization tests which prove that sugar beet infected by *Heterodera marioni* is undesirable material for sugar extraction. Even light infestations cause considerable damage as the galls cannot be completely separated from the tap root. M.J.T.

553—Japanese Journal of Zoology.

a. ISHII, N.—" Brief note on a new species of fish trematodes, *Urorchis imba*." VI (3), 547-549. [1935.]

(553a) *Urorchis imba* n. sp. is described from the intestine of *Pseudorasbora parva* in Chiba Prefecture of Japan and is differentiated from *U. goro* Ozaki. R.T.L.

554—Journal of the American Medical Association.

a. LeCOMTE, R. M.—" The management of renal tumors including cysts." CV (24), 1963-1965. [1935.]

555—Journal of the American Veterinary Medical Association.

a. SCHROEDER, C. R. & WEGEFORTH, H. M.—" The occurrence of gastric ulcers in sea mammals of the California coast, their etiology and pathology." LXXXVII (3), 333-342. [1935.]

(555a) Certain gastric ulcers found in the Californian sea lion are associated with the invasion of the stomach wall by *Anisakis similis*. R.T.L.

556—Journal of the Central Society for Veterinary Medicine. Tokyo.

a. SUGIMOTO, M.—" On the Filaria from domestic fowls in Formosa." XLVIII (4), 277-289. [In Japanese.] [1935.]

557—Journal of Chemotherapy.

a. GREENWOOD, D. N.—" Chemotherapy of experimental trichiniasis." XII, 232-234. [1935.]

558—Journal de Chirurgie.

a. GOINARD, P. & VIGNARDOU, M.—" La chirurgie des kystes hydatiques calcifiés." XLVI (3), 321-346. [1935.]

559—Journal of the Colorado-Wyoming Academy of Sciences.

a. SCOTT, J. W.—" The plerocercoids of Yellowstone Lake trout." II (1), p. 82. [1935.]

560—Journal of Comparative Pathology and Therapeutics.

a. STEWART, W. L. & PIERCY, S. E.—" Border pining in sheep. I." XLVIII (3), 157-191. [1935.]

(560a) Stewart & Piercy give an account of their investigations into the cause of " pining " in Northumbrian hill sheep.

Blood analyses and faecal examinations extending over a period of about 18 months were carried out on both "pining" and "non-pining" sheep and it was found that the worm egg counts in the faeces varied inversely with the haemoglobin values.

Post-mortem examinations revealed heavy infections with trichostrongyles and the authors conclude that in many cases "pining" can be attributed to parasitic gastritis and enteritis. D.O.M.

561—Journal of the Japanese Society of Veterinary Science.

a. ISSHIKI, O.—"An anatomical view of a monkey infected with *Oesophagostoma intestinalis* and studies on *Oesophagostomum apiostomum* (Willach, 1891)." XIV, 65-97. [In Japanese: English summary pp. 99-102.] [1935.]

b. ICHIOKA, A. & KATO, T.—"Über die Pathogenese von den Blutschwitzen des Pferdes." XIV, 194-219. [In Japanese: German summary pp. 217-218.] [1935.]

c. ONO, S.—"Studies on the trematodes, invading *Lymnaea* snails as the first intermediate hosts, found in the vicinity of Mukden. II. On the encystation and development of Echinostomidae." XIV, 232-248. [In Japanese: English summary pp. 245-246.] [1935.]

(561a) The pathological findings of an infection with *Oesophagostomum apiostomum* in a *Macacus rhesus* are reported. R.T.L.

(561b) *Filaria haemorrhagica* is always present in the subcutaneous fatty tissues of the lesions known as bloody sweat in horses. The larvae occur in the extravasated blood. The clinical and pathological changes are set up by the larvae as they hatch from the host. The larvae do not remain in the tissues long but gain access to the blood stream. R.T.L.

(561c) Previous infestation of *Limnaea* spp. with *Echinostoma*, *Plagiorchis* or *Schistosoma* does not inhibit subsequent penetration and cyst formation of Echinostome cercariae in the bodies of these snails. The domestic duck was found infested with *Echinostoma gotoi* and *E. revolutum* after feeding with encysted larvae from *Limnaea*. R.T.L.

562—Journal of the Marine Biological Association of the United Kingdom.

a. LEBOUR, M. V.—"*Hemiurus communis* in *Acartia*." XX (2), 371-372. [1935.]

563—Journal de Médecine de Bordeaux et de la Région du Sud-Ouest.

a. MANDOUL, H.—"Les vers intestinaux." CXII (32), 895-898. [1935.]

564—Journal de Médecine de Paris.

a. ROUÈCHE & TERRASSE, J.—"L'helminthiase de l'enfant et son traitement." LV (10), 205-210. [1935.]

(564a) [This paper also appears in Méd. Infant. See below No. 583a.]

565—Journal of the Medical Association of Georgia.

a. SANFORD, S. P.—"Hookworm disease as focus of infection." XXIV, 365-369. [1935.]

566—Journal of Morphology.

a. WILLEY, C. H.—"The excretory system of the trematode, *Typhlocoelum cucumerinum*, with notes on lymph-like structures in the family Cyclocoelidae." LVII (2), 461-470. [1935.]

(566a) In many features the excretory system of *Typhlocoelum cucumerinum* resemble the lymph system of the Amphistomes. Since the vessels communicate with the excretory vesicle and no other excretory organs occur the structure must be interpreted as excretory. The single network of vessels in *Typhlocoelum* shows characteristics of both lymph and excretory systems and probably carries on the functions of both. It is stated that *T. americanum* shows no significant differences from *T. cucumerinum* and is to be regarded as a synonym. R.T.L.

567—Journal of the Public Health Association of Japan.

a. SASAKI, T.—"A case of carbon-tetrachloride poisoning." XI (5), 1-3. [1935.]
b. OHASHI, K.—"The results obtained in Hyogo Prefecture by the use of improved privies of the Home Office design on the prevention of parasite diseases." XI (6), 1-4. [1935.]
c. TAKASAKI, J.—"Prevalence of intestinal parasites, particularly of hookworms in Saitama Prefecture and its prevention work." XI (10), 1-12. [1935.]

(567b) Statistics are given to show the diminution in the percentage of infections with various helminth parasites in two Japanese villages which has followed on the introduction of a privy of "Home Office design." Apart from the fact that the faeces are retained for three months in the privy, which appears to have at least five chambers, no details are given of this new contraption. R.T.L.

568—Journal of Science of the Hiroshima University, Series B, Division I, Zoology.

a. OZAKI, Y.—"Trematode parasites of Indian porpoise *Neophocaena phocaenoides* Gray." III, 115-138. [1935.]
b. OZAKI, Y.—"Studies on the frog-trematode *Diplorchis ranae*. I. Morphology of the adult form with a review of the family Polystomatidae." III, 193-225. [1935.]

(568a) From *Neophocaena phocaenoides* from the southern seas of Japan three trematode species, *Orthosplanchnus elongatus* n. sp., *Campula folium* n. sp. and *Nasitrema spathulatum* n. g., n. sp. are described. A formal statement of the chief characters of the genus *Nasitrema* is given. It is related to Fasciolopsinae but is placed by Ozaki in a new subfamily Nasitrematinae. R.T.L.

(568b) While *Polystoma integerrimum* is rare in Japan, *Diplorchis ranae* is very common. Ozaki describes the latter species in detail. He gives keys for the six genera of Polystomatidae and for the thirteen species of the genus *Polystomoides*. Two new species are included, viz., *P. japonicum* and *P. exhamatum* from *Clemmys japonicus*. Ozaki adopts Ward's suggestion that *P. coronatum* Leidy, 1888 should be given generic rank and creates for it *Parapolystoma* n. g. with *P. bulliense* Johnston, 1912 as type and with *P. alluaudi* as a third species. R.T.L.

569—Journal of the Shanghai Science Institute. Section IV.

a. YOUNG, S.—"The blood picture in human fasciolopsiasis (*F. buski*)." I, 177-199. [1935.]

b. KOMIYA, Y., KAWANA, H. & TAO, S. C.—"Study on *Clonorchis sinensis* in the district of Shanghai. I. Epidemiology of human Clonorchiasis." I, 271-292. [1935.]

570—Journal of the South African Veterinary Medical Association.

a. MÖNNIG, H. O.—"Oesophagostomiasis in sheep." VI (4), 250-252. [1935.]

(570a) Mönnig's brief account of the anthelmintic treatment of oesophagostomiasis in sheep is more fully dealt with elsewhere [see below No. 600a]. J.W.G.L.

571—Journal of the Tennessee Academy of Science.

a. HARWOOD, P. D.—"Notes on Tennessee helminths. II. Two new species of *Strongyluris* (Nematoda) and notes on the genus." X (2), 131-141. [1935.]

(571a) Harwood remarks on the confusion which exists in present-day literature owing to the fact that several older species of *Strongyluris* are inadequately described, and few redescriptions are available. He gives a redescription of *S. ornata* (Linstow, 1897) Baylis & Daubney, 1922 from *Agama agama turnensis* and *A. atricollis* from Tanganyika. Two new species of *Strongyluris* are then described, viz., *S. media* n. sp. in *Chamaeleon multituberculata* from East Africa and *S. rubra* n. sp. in *Sceloporus undulatus* (rail fence lizard) from Nashville, Tennessee and Raleigh, N. Carolina. *S. rubra* is the first recorded member of this genus from North America and resembles *S. elegans*, from which it is easily separated by the lesser number of caudal papillae and by the blunt end of the tail spike. Harwood concludes his paper with a key to the species of *Strongyluris*, based mainly on the presence or absence of somatic papillae. A.E.F.

572—Journal d'Urologie Médicale et Chirurgicale.

a. DIAMANTIS, A.—"Le cancer bilharzien vésical; à propos de onze cas personnels dont deux cas de cancer bilharzien vésical non infecté." XL (5), 408-432. [1935.]

573—Jugoslovenski Veterinarski Glasnik.

a. KOCJAN, L.—"Bolezni golobov v severnih krajih Jugoslavije s posebnim ozirom na enzootska paratifozna obolenja." XV, 67-77. [In Serbo-Croatian: German summary p. 76.]

(573a) [Cases of sickness of pigeons in the northern districts of Yugoslavia with special reference to enzootic paratyphoid disease.]

574—Kinderärztliche Praxis.

a. RIETSCHEL, H.—"Zur Behandlung der Oxyuriasis." VI (11), 485-488. [1935.]

(574a) Rietschel is convinced that internal re-infection occurs in human threadworm infections. Hence, whilst the usually advocated control

measures are of value in preventing oral infection, they are by themselves inadequate. The propagating threadworm can be attacked, however, by giving the patient a diet unfavourable to the parasite over a period of a fortnight with subsequent repetitions if necessary. Such a diet consists of plentiful proteins and fats, with sugar, toast and fruit juices. The object is to avoid cellulose " roughage " entirely, so that fruits (apart from the juice) and vegetables are omitted. This diet has given excellent results in obstinate cases. B.G.P.

575—Klinicheskaya Meditsina.

a. FARZANE, G. A. & IBRAGIMOV, K.—[Ileus caused by *Taenia solium*.] XIII, p. 1726. [In Russian.] [1935.]
b. KHALFEN, S. S.—[Alveolar echinococcus of liver.] XIII, 1902-1905. [In Russian.] [1935.]

576—Klinike. Athens.

a. PANAYOTATOU, A. G.—[On filariasis.] X, [Reprint 19 pp.] [In Greek.] [1935.]

(576a) Panayotatou gives a general account of Filariasis bancrofti in man, from the pathological and clinical aspects. B.G.P.

577—Kongelige Norske Videnskabers Selskabs Forhandlinger.

a. ALLGÉN, C.—" Zur Kenntnis norwegischer Nematoden. I." VII, 16-19. [1935.]
b. ALLGÉN, C.—" Zur Kenntnis norwegischer Nematoden. II. Neue und wenig bekannte freilebende Nematoden aus Tarva." VII, 35-38. [1935.]

(577a) Allgén reports on marine nematodes of the beach fauna collected at certain localities on the Norwegian coast. Of the 39 species found, 33 were already known to science and these are listed under their appropriate orders with particulars as to numbers and sex for each species. T.G.

(577b) Allgén continues the description of Norwegian marine nematodes dealing particularly with those taken at Tarva. The following are new to science : *Tarvaia donsi* n. g., n. sp., *Dignathonema norvegicum* n. sp., *Penzancia paravelox* n. sp., and *Enoploides cephalophorus* (Ditl.) var. *tarvaensis*, n. v. T.G.

578—Lingnan Science Journal.

a. HSU, Y. C.—" Helminths of cows in Soochow." XIV (4), 605-610. [1935.]
b. CHEN, H. T.—" The intermediate hosts of *Paragonimus*." XIV (4), p. 695. [1935.]

(578a) In the neighbourhood of Soochow the following helminths occur in cattle, *Fischoederius elongatus*, *Paramphistomum cervi*, *Cotylophoron cotylophorum*, *Paramphistomun chinensis* n. sp. and *Eurytrema pancreaticum*, *Moniezia planissima* and *Setaria papillosa*. The new amphistome is not differentiated from allied species [and would appear to be an immature form]. R.T.L.

(578b) Chen now gives the specific diagnosis of the first and second intermediate hosts of *Paragonimus*, reported by him in 1935 [see Helm. Abs.,

Vol. IV, No. 42b], as *Assiminea lutea* and *Sesarma* (*Sesarma*) *sinensis* and *Sesarma* (*Holometopus*) *dehaani*. The two crabs are often found in the same locality and are easily confused. R.T.L.

579—Lyon Médical.

a. DUFOURT, A. & ROMAN, E.—"Diarrhée chronique provoquée par *Hymenolepis nana*. Étude du parasite." CLVI (35), 255-258. [1935.]
b. GUILLEMINET & GAYET, R.—"Cholécystite aiguë d'origine ascaridienne." CLVI (52), 775-779. [1935.]

(579a) *Hymenolepis nana* is rare in France. An endemic case is reported from Villeurbanne in which there was an associated chronic diarrhoea. R.T.L.

580—Maanedsskrift for Drylaeger.

a. GRINSTED, P.—"Tilfaelde af Drejesyge (Coenurosis) hos Kalve med Initialsymptomer og Paavisning af Larvestadiet i Hjernen." XLVII, 65-68. [1935.]
b. CHRISTIANSEN, M.—"Forsog med Overforelse af Kvaeser (*Coenurus cerebralis* til Kalve og Lam." XLVII, 273-286. [1935.]
c. CHRISTIANSEN, M.—"De vigtigste smitsomme Sygdomme hos Vildtet." XLVII, 353-368; 392-403; 449-463; 481-491; 509-517; 539-551; 570-582. [1935.]

(580a) [Case of coenuriasis in a calf with early symptoms and rudimentary larval stages in the brain.]

(580b) Although recent outbreaks of coenuriasis in Denmark have been confined to cattle, suggesting the existence of a specialized variety of *Coenurus cerebralis*, yet Christiansen has shown by experimental feeding via dogs to calves and lambs that this parasite is equally infective to sheep, and that it is quite typical morphologically. B.G.P.

(580c) In these seven sections Christiansen surveys the more important diseases of game animals and birds which have come under his notice in Denmark. Helminths are discussed under the following headings: hares (pp. 449-460); deer (pp. 486-491 & 509-511); carnivores (pp. 516-517) and birds (pp. 572-582). B.G.P.

581—Magasin de Parasitologie de l'Institut Zoologique de l'Académie des Sciences de l'URSS.

a. KAMALOW, N.—"Zur Fauna der parasitären Würmer bei den Wölfen." V, 249-251. [In Russian: German summary p. 251.]
b. LEWASCHOW, M.—"Beiträge zur Kenntnis der pflanzenbewohnenden Nematoden Abchasiens und der kaukasischen Schwarzmeerküste." V, 301-315. [In Russian.] [1935.]
c. GURWITSCH, G. A.—"Die Wurzelnematode (*Heterodera marioni* Cornu 1879) (*Heterodera radicicola* Greef 1872) an Kulturplanzen der östlichen Schwarzmeerküste." V, 317-337. [In Russian.] [1935.]

(581a) Kamalow reports, from 17 grown wolves and 4 cubs in the Tiflis zoo-park, six species of nematodes, five of cestodes, and *Alaria alata*, giving the percentage incidence in each case. The cubs harboured only hookworms and ascarids, the presence of mature *Toxocara canis* in a cub of three weeks suggesting prenatal infection. B.G.P.

(581b) Lewaschow records the occurrence of galls caused by the root-knot nematode, *Heterodera marioni*, on the roots of certain cultivated and wild plants in the region of the Black Sea coast of Caucasia and discusses the necessity of such measures as quarantine and the organisation of agricultural and biological personnel to prevent the spread of the parasite to other areas where tobacco and ethereal oil crops are grown. T.G.

(581c) Gurwitsch summarizes methods of preventing the spread of ~~*Heterodera schachtii* and~~ *H. marioni* and methods of control which may be adopted in infected areas. Surveys of areas not yet known to be infected combined with quarantine measures are recommended. Fallowing, crop rotation, chemical and steam treatments of soil are considered in relation to control. M.J.T.

582—Maroc Médical.

a. MARTIN & ARNAUD.—"Epidémiologie de la 'maladie hydatique' au Maroc. Première partie. L'échinococcose humaine." XV (158), 307-311. [1935.]

b. VELU, H. & SARTHOU.—"Epidémiologie de la 'maladie hydatique' au Maroc. Deuxième partie. L'échinococcose du bétail au Maroc." XV (158), 312-318. [1935.]

(582a) Martin & Arnaud have investigated the epidemiology of echinococcosis in Morocco and, from a statistical survey of human hospital cases, have found the disease to be comparatively rare. Women are more frequently parasitized than men and children and the areas most heavily infected correspond with those where cattle, in which sterile cysts are rare, are most frequently pastured. J.N.O.

(582b) Velu & Sarthou, in a survey of animal echinococcosis in Morocco based on abattoir statistics, find that heavy infestation of sheep and cattle is confined to areas which have a high rainfall and where cattle rearing is largely practised. Where cattle are scarce or absent, as in the drier regions of the South, sheep are but lightly infected. In sheep, calcification of the cyst, more especially in the liver than in the lungs, appears to be a normal process, whereas in cattle this process, particularly in the lungs, is exceptional; cattle, therefore, are considered to be much more dangerous than sheep. The authors consider the rôle of the carnivore very important in the epidemiology of echinococcosis and believe that the frequency of infection in herbivores is linked up with the infested pariah dogs which frequent the villages. J.N.O.

583—Médecine Infantile.

a. ROUÈCHE & TERRASSE, J.—"L'helminthiase de l'enfant et son traitement." XLII, 77-89. [1935.]

(583a) [This paper appears also in J. Méd. Paris. See above No. 564a.]

584—Medical Press and Circular.

a. DEW, H. R.—"Hydatid disease—a general survey." CXCI (5022), 104-110. [1935.]

(584a) [This paper appears also in Vet. J. See below No. 683a.]

585—Medical Record.

a. RAGANY, J.—" Silver salvarsan in the treatment of trichinosis." CXLII (7), p. 335. [1935.]

(585a) Ragany has treated seven cases of trichinosis successfully with silver salvarsan. The subjects were adults and children, and in each case marked eosinophilia was present. Six to ten intravenous injections of silver salvarsan were given to each patient, reaching a total of ten grammes in the adults. Drowsiness followed the first three injections, but after this a marked improvement was evident, except in one patient who had developed polyneuritis. This case responded to treatment after the sixth injection. K.S.

586—Medicina Ibera.

a. CALVO MELENDRO, J.—" Indicaciones del neumotórax artificial en el tratamiento de la equinococosis pulmonar." Año XIX, II (927), 198-202. [1935.]

587—Medicina del Lavoro.

a. VERNETTI BLINA, L.—" Il ricambio emoglobinico nella anemia da anchilostoma." XXVI (9), 337-338. [1935.]
b. VERNETTI BLINA, L.—" Le modificazioni della massa sanguigna circolante nella anchilostomiasi." XXVI (9), 338-340. [1935.]

588—Medicina de los Países Cálidos.

a. KOURÍ, P. & VALVERDE, A.—" Nuevo caso cubano de fasciolosis hepática humana. Curación por la emetina. Estado actual de la emetinoterapia en esta parasitosis." VIII (10), 457-468. [French summary p. 468.] [1935.]
b. DARRIBA, A. R.—" Oncocercosis americana." VIII (12), 561-573. [1935.]

(588b) Darriba gives a condensed account of human onchocerciasis in Mexico and Guatemala, touching briefly upon the historical aspect and dealing successively with the incidence and location of the nodules, coastal erysipelas (which, according to Strong, may be due to a streptococcal infection secondary to the slight skin inflammation caused by the microfilariae), ocular lesions, transmission, treatment and prevention. Nodules should always be extirpated, if only as a prophylactic measure. Measures aimed at destroying Simulium or preventing its biting, are not very practicable at present.

B.G.P.

589—Medizinische Welt.

a. SCHÄFER, W. & LODENKÄMPER, H.—" Ein zwanzigjähriges Darmleiden, hervorgerufen durch *Strongyloides intestinalis*." IX (35), 1241-1244. [1935.]

(589a) Schäfer & Lodenkämper describe and figure the free living stages of *Strongyloides stercoralis*, the pathological changes induced by the parasitic female and suggest methods of treatment. They discuss the toxic responses of the infective larva and the bearing of them on its powers of penetration of the human skin. They further discuss the importance of the lung stages and compare and contrast these stages with those of *Ascaris* and *Ancylostoma*. P.A.C.

590—Memoirs of the Faculty of Science and Agriculture. Taihoku.

a. HARADA, I.—"Zur Acanthocephalenfauna von Japan." XIV (2), 7-23. [1935.]

(590a) In this paper Harada describes 8 genera and 9 species of Acanthocephala of Japan, of which 2 genera and 5 species are new. The hosts are salt water and fresh water fish, amphibia, reptiles and mammals. Harada makes the following new records: (i) *Micracanthorhynchus* n. g., a parasite of fresh water fish. Harada puts this in the family Rhadinorhynchidae. (ii) *M. motomurai* n. sp. from the intestine of *Zacco* sp., Korea. (iii) *Rhadinorhynchus trachuri* n. sp., from the intestine of *Trachurus japonicus*. *R. selkerki* (Van Cleave 1921) is very imperfectly described and although the hooks on the proboscis are similar their dimensions do not agree. (iv) *Corynosoma ambispinigerum* n. sp. from the small intestine of *Phoca* sp. in the North Pacific (Japan). Harada differentiates between *C. strumosum* and this n. sp. which is synonymous with *C. osmeri* Fujita. Fujita's description is emended and supplemented. (v) *Bolbosoma thunni* n. sp. is described from the intestine of *Thunnus thynnus*, Japanese sea waters. Harada considers *Acanthocephalus lucidus* Van Cleave 1925, to be a synonym of *A. artatus* Van Cleave 1925. He considers the following to be synonyms of *A. echigoensis* Fujita 1920: *A. oncorhynchi* Fujita 1921, *A. aculeatus* Van Cleave 1931 and *A. acerbus* Van Cleave 1931. (vi) *Spirorhynchus alemniscus* n. g., n. sp., parasitic in the intestine of the Formosan sea fishes *Scatophagus argus* and *Lutianus russelli*, is placed in Spirorhynchidae n. fam. *Macracanthorhynchus hirudinaceus* Pallas 1781 is recorded from *Sus scrofa domesticus* in Formosa.

A.E.F.

591—Memorias de la Sociedad Cubana de Historia Natural "Felipe Poey."

a. PÉREZ VIGUERAS, I.—"*Tristomum poeyi* n. sp. (Trematoda), parasito de *Makaira ampla* Poey (Pisces)." IX (1), 43-44. [1935.]
b. PÉREZ VIGUERAS, I.—"Notas sobre la fauna parasitologica de Cuba." IX (1), 45-49. [1935.]
c. PÉREZ VIGUERAS, I.—"*Torrestrongylus torrei* n. gen. n. sp. parasito de Chiroptera." IX (2), 57-58. [1935.]
d. PÉREZ VIGUERAS, I.—"Notas sobre la fauna parasitologica de Cuba." IX (2), 59-66. [1935.]
e. KOURÍ, P. & FRADE, A. DEL.—"La clonorchiasis en la Ciudad de la Habana." IX (2), 77-88. [1935.]

(591b) Pérez Vigueras presents the first part of a check-list of parasites found in Cuba, consisting of a species of Turbellaria recorded by Hoeppli from human urine, and 12 species of trematodes. B.G.P.

(591d) Pérez Vigueras continues his check-list [see previous abstract] with a list of 30 species of cestodes. B.G.P.

(591e) Of 100 natives of Canton, resident in Havana, 49 carried *Clonorchis sinensis*. Immigration of such carriers however is not likely to set up a focus of clonorchiasis in Cuba as the necessary intermediate hosts are absent. P.A.C.

592—Monatsschrift für Kinderheilkunde.

a. BRÜNING, H.—"Eingeweidewürmer bei Kindern." LXIV (2/3), 232-240. [1935.]

593—Morgagni.

a. MASI, G. DE.—" Il glutatione del sangue nelle parassitosi intestinali." LXXVII (50), 1318-1322. [1935.]

(593a) In twelve anaemia cases, all infected with parasites, De Masi has determined the glutathione of the blood (Gabbe technique) and also a ratio, which he states as " Glutathione/Red cells." His results [not given] are said to show that in five hookworm cases the total glutathione was normal while the ratio, which is normally 0·59, was increased to 1·0 or above. The remaining cases, parasitized by other helminths and by protozoa, showed the total glutathione decreased and the ratio normal or decreased. He contrasts the hookworm-anaemia results with those obtained in tubercular and other secondary anaemias. B.G.P.

594—National Institute of Health Bulletin. United States Public Health Service.

a. STILES, C. W. & BAKER, C. E.—" Key-catalogue of parasites reported for Carnivora (cats, dogs, bears, etc.) with their possible public health importance." No. 163, pp. 913-1223. [1935.]

595—Nederlandsch-Indische Bladen voor Diergeneeskunde en Dierenteelt.

a. KRANEVELD, F. C.—" Stephanofilariosis. VII. Een door de *Stephanofilaria dedoesi* veroorzaakte ooraandoening bij buffels. (Voorloopige mededeeling)." XLVII (6), 310-316. [In Dutch: English and German summaries p. 316.] [1935.]

(595a) A dermatitis affecting the ears of buffalo in Sumbawa and Celebes (Dutch East Indies) is reported by Kraneveld as due to local infection with *Stephanofilaria dedoesi*. The dermatitis takes the form of papules, and occasionally of encrustations, and is restricted to the ears—in contrast to the more generalized skin lesions (" cascado ") caused by this parasite in the ox and the goat. Six photographs of affected ears are appended. B.G.P.

596—New Zealand Medical Journal.

a. BARNETT, L.—" A department for hydatid disease research and prevention." XXXIV (182), 258-260. [1935.]

597—North American Veterinarian.

a. MORRIS, M. L., DINKEL, J. H. & GREEN, D. F.—" A comparative study of the drop method and concentration method for the diagnosis of *Dirofilaria immitis*, canine heart-worm." XVI (11), 39-40. [1935.]

b. KRULL, W. H.—" Experiments with *Fascioloides magna* involving the final host." XVI (12), 26-28. [1935.]

(597a) The fresh smear method of determining the presence of *Dirofilaria immitis* embryos in the blood is shown to give an error of 50% as compared with centrifuging. R.T.L.

(597b) Krull has shown by feeding experiments with cercariae that *Fascioloides magna* is lethal to rabbits but does not reach maturity. In

cattle maturity occurred but eggs were not passed by these hosts. The flukes developed normally in sheep, and eggs were passed about 5 months after experimental infection. J.W.G.L.

598—Nuovo Ercolani.

a. GARZIA, G.—"Un caso di distomatosi epatica da *Distomum magnum* (Bassi 1875) nel bovino." XL (3), 126-132. [1935.]

599—Ohio Journal of Science.

a. ANDERSON, M. G.—"Some intestinal parasites of *Natrix sipedon* Linn., with notes on the identity of *Ophiotaenia* (*Taenia*) *lactea* Leidy with *Ophiotaenia perspicua* LaRue." XXXV (2), 78-80. [1935.]

(599a) Anderson reports for the first time from *Natrix sipedon* the cestode *Ophiotaenia perspicua*, which is probably *Taenia lactea* of Leidy, and an Acanthocephalan *Leptorhynchoides thecatus*, acquired accidentally through the eating of infected fish. A single male nematode was found, of the genus *Camallanus*, but the species could not be determined. E.M.S.

600—Onderstepoort Journal of Veterinary Science and Animal Industry.

a. MÖNNIG, H. O.—"The chemotherapy of oesophagostomiasis in sheep. II." V (2), 419-438. [1935.]
b. MÖNNIG, H. O. & QUIN, J. I.—"Studies on the alimentary tract of the Merino sheep in South Africa, II. Investigations on the physiology of deglutition, II." V (2), 485-499. [1935.]

(600a) Mönnig has carried out large scale tests on relatively insoluble drugs concurrently with a series of investigations on the physiology of deglutition in sheep. He finds that a mixture of copper arsenate, calcium hydroxide and copper tartrate appears to be an effective remedy against oesophagostomiasis if administered directly into the abomasum. This he achieves by stimulation of the oesophageal reflex with a 10% solution of copper sulphate and by giving a double dose of the mixture. Full directions for dosing are appended. K.S.

(600b) Mönnig & Quin recommend a solution of copper sulphate for the stimulation of reflex closure of the oesophageal groove in sheep. Under favourable conditions a 0·25% copper sulphate solution will produce this stimulus, but a 10% solution is necessary to overcome the counteracting effects of age, poor condition and dryness of the ruminal contents. The authors find that preliminary starvation is unnecessary and that the method of administration is unimportant. The reflex is established immediately the stimulant touches the mucosa of the pharynx and closure of the groove is maintained for at least 15 seconds. Small pills may be swallowed into the abomasum after stimulation but capsules are not. As the abomasal mucosa is very tender, care must be exercised in administering concentrated drugs in this way. Experiments have been started to find the time taken by drugs administered into the abomasum to pass through the intestines. These indicate that the drug may reach the colon in about five hours and be passed in the faeces from the 15th hour. K.S.

601—Orvosi Hetilap.

a. SZABÓ, K.—" Az ascaris ileusról." LXXIX (47), 1243-1244. [1935.]

602—Pamietnik (XIV) Zjazdu Lekarzy i Przyrodników Polskich w Poznaniu. 1933.

a. EJSMONT, L.—" Zalezność pomiedzy lokalizacją *Dioctophyme renale* a drogami rozwojowemi w zywicielu." 1933, I, 861-865. [1935.]

(602a) This is a Polish abstract of a paper read by Ejsmont at the 14th Congress of the Polish Medical Specialists and Scientists held at Poznan. The paper is published in full in *Roczniki prac Naukowych Zrzeszenia Asystentów Uniwersytetu Józefa Pilsudskiego w* Warszawie, I (2), 473-485 [see Helm. Abs., Vol. V, Pt. 5]. B.G.P.

603—Papers of the Michigan Academy of Science, Arts and Letters.

a. KRULL, W. H.—" Studies on the life history of a frog bladder fluke, *Gorgodera amplicava* Looss, 1899." XX, 697-710. [1935.]

(603a) Krull describes the experiments whereby he has established the life-history of *Gorgodera amplicava*. The first and second intermediate hosts are a bivalve, *Musculium partumeium*, and a snail, *Helisoma antrosa*, respectively. The final host may be either *Rana clamitans* or *R. catesbeiana*. The life cycle is unique among known frog bladder flukes in that a snail instead of an insect serves as second intermediate host. E.M.S.

604—Pediatría Española.

a. SUÁREZ, M.—" Neumotórax espontáneo." Año XXIV (274), 249-257. [1935.]

605—Pediatria del Medico Pratico.

a. LATTES, E.—" Ricerche sulla frequenza di elminti intestinali nell'infanzia." X, 362-371. [1935.]
b. MALAVASI, W.—" L'elmintiasi nell'infanzia e suoi possibili errori diagnostici." X, 495-509. [1935.]
c. EGIDI, E.—" Su di un caso di cisti da echinococco del fegato e del polmone." X, 548-552. [1935.]

606—Peking Natural History Bulletin.

a. HU, S. M. K.—" Studies on the susceptibility of Shanghai mosquitoes to experimental infection with *Wuchereria bancrofti* Cobbold. III. *Culex tritaeniorhynchus* Giles." X (1), 39-43. [1935.]
b. HU, S. M. K.—" Studies on the susceptibility of Shanghai mosquitoes to experimental infection with *Wuchereria bancrofti* Cobbold. IV. *Aedes vexans* var. *nipponii* Theobald." X (2), 127-131. [1935.]
c. HSÜ, Y. C.—" Trematodes of fowls in Soochow." X (2), 141-150. [1935.]

(606a) Of 181 *Culex tritaeniorhynchus* experimentally fed on a heavy *F. bancrofti* case, 97 were found by Hu to be infected after 10 days, but in only four of these was development completed. B.G.P.

(606b) Of 195 *Aëdes vexans* fed with *Wuchereria bancrofti*, 140 were later found to contain only dead larvae. They were of a microfilarial form

and had undergone chitinous encapsulation. After penetrating the body cavity of the mosquito, they had apparently undergone no further development. P.A.C.

(606c) Hsü has collected 8 species of flukes from chickens, ducks and geese in Soochow, including *Opisthorchis anatis*, *Prosthogonimus japonicus* and *Echinostoma revolutum*. Five new species are described. *Prosthogonimus leei* n. sp. occurs in the egg albumen of ducks and is characterized by a very short oesophagus. *Echinostoma minor* n. sp. was recovered from the intestine of a chicken, and had elliptical testes, showing no lobulation. *E. elongata* n. sp. from ducks had large testes occupying the greater part of the middle of the body. The uterus is extremely short. *Hypoderaeum sinensis* n. sp., parasitic in ducks and chickens, has a much reduced head crown and a small convoluted ovary. *Paramonostomum ovatus* n. sp. (Notocotylidae) occurred in the caecum of ducks. The pharynx and prepharynx are both absent in this species. It closely resembles *P. elongatum* but differs in the extent of the cirrus sac and vitellaria. P.A.C.

607—Pharmaceutical Journal.

a. CAWSTON, F. G.—"Tartar emetic and sodium antimonyltartrate." [Correspondence.] CXXXV (3749), p. 260. [1935.]

608—Philippine Journal of Science.

a. JESUS, Z. DE.—"*Lymnaea philippinensis*, an intermediate host of *Fasciola hepatica* in the Philippines, with some observations on the bionomics of the parasite." LVIII (3), 299-314. [1935.]
b. TUBANGUI, M. A. & MASILUÑGAN, V. A.—"Trematode parasites of Philippine vertebrates, VII. Additional records of new species." LVIII (4), 435-444. [1935.]
c. TUBANGUI, M. A., BASACA, M., PASCO, A. M. & ROSARIO, F. DEL.—"Observations on the geographical distribution of hookworm parasites and hookworm disease in the Philippines." LVIII (4), 447-468. [1935.]

(608a) *Limnaea philippinensis* which is widely distributed in the Philippine Islands has been shown experimentally to be the intermediate host of *Fasciola hepatica*. The prevailing temperature throughout the year in these islands is favourable to the hatching of the fluke eggs. The life cycle is completed in the mollusc in from 35 to 48 days in the laboratory and in from 44 to 48 days in the field. The free-swimming cercariae are not infective. In a goat experimentally infected mature flukes which had not attained to egg production were found 110 days after infection. R.T.L.

(608b) Systematic descriptions are given of *Opisthorchis ophidiarum* n. sp. in the watersnake, *Lapemis hardwickii*, *Echinostoma charadrii* n. sp. in *Pluvialis fulvus*, *Pegosomum bubulcum* n. sp. in the liver of *Bubulcus coromandus*, *Paradistomum excalotes* n. sp. in the gall bladder of *Calotes calotes marmoratus*, *Euclinostomum multicaecum* n. sp. encysted in muscles of *Ophicephalus striatus*, *Ectenurus lemeriensis* n. sp. in a leather jacket (*Scomberoides* sp.). R.T.L.

(608c) A quantitative survey of hookworm incidence in several widely separated places in the Philippine Islands by Tubangui and his co-workers shows that the significance of the infection has been under-estimated by previous observers. Hookworm disease was invariably met with in individuals

having over 10,000 eggs per c.c. of faeces. Variations in incidence are not due to differences in habits of the people but to climatic and other environmental factors that influence the temperature and moisture of the soil.

R.T.L.

609—Plant Disease Reporter. Supplement.

a. EDSON, H. A., MILLER, P. R. & WOOD, J. I.—"Diseases of plants in the United States in 1934." No. 90, 135 pp. [1935.]

(609a) Edson, Miller & Wood in a list of plant diseases observed in U.S.A. during 1934 include several reports of affections due to the following parasitic nematodes :—*Anguillulina dipsaci* attacking ox-eye daisy, narcissus, soybean, *Trifolium arvense* and *T. repens* ; *A. pratensis* on potato ; *A. tritici* on wheat ; *Aphelenchoides fragariae* on begonia, chrysanthemum, *Ligustrum*, strawberry and Takasago lily ; *Heterodera marioni* on Antirrhinum, apple, bean, beet, carrot, celery, cotton, cowpea, *Gardenia*, onion, paeony, pepper, potato, rose, sweet potato, tobacco, tomato and *Weigelia* ; *H. schachtii* on sugar beet.

T.G.

610—Poultry Science.

a. BLEECKER, W. L. & SMITH, R. M.—"The influence of vermifuge treatment of laying hens under field conditions." [Abstract of a paper presented at the 27th Annual Meeting of the Poultry Science Association.] XIV (5), p. 313. [1935.]

(610a) Bleecker & Smith find that the efficiency of commercial vermifuges for hens varies considerably and recommend that the birds should be treated individually when young before being put on free range and later before they come in to lay.

P.A.C.

611—Prager Tierärztliches Archiv.

a. KOHN, F. G.—"Parasitologische Beiträge." XV (5), 107-114. [1935.]

(611a) Kohn reports on (i) a mixed infection of coccidia and a species of Strongyloides in a goat, and on (ii) a number of miscellaneous helminths and other parasites found in mammals and fish in the Karlsbad region.

B.G.P.

612—Presse Médicale.

a. MOIROUD, P. & LUNA, C. DE.—"De la valeur du tubage duodénal pour le diagnostic de kyste hydatique du foie ouvert dans les voies biliaires." XLIII (82), p. 1580. [1935.]

613—Proceedings of the Academy of Sciences (United Provinces of Agra and Oudh, India).

a. PANDE, B. P.—"Contributions to the digenetic trematodes of the Microchitroptera [Microchiroptera] of Northern India. Part III. New distomes of the genus *Mesodendrium* Faust (1919)." V (2), 243-249. [1935.]

(613a) Pande discusses the characters and species of the genera *Lecithodendrium* and *Mesodendrium*, and describes *M. mödlingeri* n. sp. and *M. elongatum* n. sp. from *Nycticejus kuhli* and *Vesperugo abranus*, respectively. In an addendum he allocates a new trematode reported by Thapar as of the Dicrocoeliidae, to the genus *Anchitrema*.

E.M.S.

614—Proceedings of the Imperial Academy (of Japan).

a. TANIGUCHI, R.—"Notes on the movement of the soil nema, *Rhabditis filiformis* Bütschli." XI (2), 77-79. [1935.]
b. OZAKI, Y.—"Two new trematodes of the family Opistholebetidae Travassos. (Preliminary note.)" XI (6), 244-246. [1935.]

(614a) Taniguchi has carried out observations on the behaviour of *Rhabditis filiformis* Bütschli. When placed in a ring of water on a glass slide or in water on blotting paper or silk material or in a vessel with vertical sides males and females bore outwards against the limiting surface with the body maintained perpendicular to the surface. This is looked upon as evidence of a thigmotactic response. Experiments were also carried out in capillary tubes to determine the effect of temperature on relative velocity and the conclusion is reached that between 14°-27°C. for the male and 16°-26°C. for the female, the relation of velocity to temperature is in harmony with the Van't Hoff-Arrhenius law, i.e., the higher the temperature, within the limits indicated, the greater the velocity of movement. T.G.

(614b) Two new amphistomoid fish trematodes are reported from the intestine of *Diodon holacanthus* Linn., viz., *Opistholebes cotylophorus* and *Heterolebes maculosus* n. g., n. sp. The generic characters are not indicated. R.T.L.

615—Proceedings of the Indian Academy of Sciences. Section B.

a. FROILANO DE MELLO, I.—"A contibution to the study of the blood parasites of some Indian birds." I (7), 349-358. [1935.]
b. VERMA, S. C.—"Studies on the Indian species of the genus *Echinochasmus*, Part I, and on an allied new genus *Episthochasmus*." I (12), 837-856. [1935.]
c. LAL, M. B.—"On the morphology of a new species of Monostome of the genus *Notocotylus* Diesing, 1839." II (5), 419-423. [1935.]
d. LAL, M. B.—"A review of the genus, *Notocotylus*, with description of a new trematode parasite of *Mareca penelope* from Lucknow." II (5), 457-466. [1935.]
e. MIRZA, M. B. & NARAYAN, S. S.—"*Strongyloides akbari* n. sp. A new nematode parasite from *Crocidura coerulea*, with a note on some species of the genus *Strongyloides*." II (6), 503-507. [1935.]

(615a) Microfilariae occur in the blood of the birds *Herodias intermedias* and *Chloropsis aurifrons davidsoni* at Goa. R.T.L.

(615b) Verma describes two new species of *Echinochasmus*, *E. bagulai* and *E. ruficapensis* n. spp., from Indian birds. He also describes *Episthochasmus caninum* n. g., n. sp. a common parasite of Calcutta street dogs. These forms all possess a peculiar chambered excretory bladder which may offer a natural basis of classification of the echinostomes. E.M.S.

(615c) Lal describes *Notocotylus indicus* n. sp. from the intestinal caeca of *Mareca penelope*, Lucknow. The genital pore is posterior to the acetabulum. E.M.S.

(615d) Lal maintains that the number of the ventral glands can be used as a diagnostic character in *Notocotylus*. He subdivides the genus, on the basis of the position of the genital pore, into three new genera, characterised as follows: *Notocotylus sens. str.*, genital pore behind the intestinal fork, type, *N. attenuatus*; *Hindia* n. g., genital pore at the intestinal

fork, type *N. gibbus*; and *Naviformia* n. g., genital pore anterior to intestinal fork, type *N. naviformes*. *Hindia lucknowensis* n. sp. is described from *Mareca penelope*. E.M.S.

(615e) *Strongyloides papillosus* Wedl, 1856 is recorded as common in *Lepus ruficaudatus* in the Aligarh District of India. *S. akbari* n. sp. from the small intestine of the musk-rat, *Crocidura cærulea*, and *S. stercoralis* var. *eryxi* n. var. from *Eryx johnii* and *S. stercoralis* var. *vulpi* n. var. from *Vulpes alopex* are new varieties. R.T.L.

616—Proceedings of the Royal Academy of Sciences, Amsterdam.

a. KRÜGER, F.—"Beiträge zur Kenntnis der Sauerstoffatmung von *Ascaris suilla*." XXXVIII (1), 101-104. [1935.]

(616a) Krüger gives a critical review of work carried out up to 1934, on the subject of the respiration of *Ascaris suilla*. He deals with the changes in value of the respiratory quotient under varying conditions of environment and time, and discusses the effect of anaerobic metabolic processes on the values observed. R.H.H.

617—Proceedings of the Zoological Society of London.

a. WOODLAND, W. N. F.—"Additional cestodes from the Amazon siluroids Pirarará, Dorād, and Sudobīm." 1934, Part 4, pp. 851-862. [1935.]
b. REES, W. J.—"The anatomy of *Cercaria buccini* Lebour, 1911." 1935, Part 2, pp. 309-312. [1935.]

(617a) Woodland describes *Myzophorus pirarará* n. sp., *M. dorād* n. sp., *M. sudobīm* n. sp., *Monticellia spinulifera* n. sp. and *Nomimoscolex sudobīm* n. sp. The status of the genus *Myzophorus* is discussed, and a list is appended of all cestodes so far reported from Amazon fishes. E.M.S.

618—Profilassi.

a. CIARROCCHI, E.—"Echinococcosi viscerale diffusa primitiva a tipo miliare in alcuni suini." VIII (3), 97-104. [English summary p. 104.] [1935.]
b. FIORINI, M.—"Sull'intradermo e intrapalpebro-reazione nella diagnosi di echinococcosi sperimentale" VIII (5), 179-184. [1935.]

(618b) Having sensitized guinea pigs with hydatid fluid from either swine or cattle, Fiorini obtained positive results from both intradermal and intrapalpebral reactions. The results were positive whether the origin of the hydatid fluid used for sensitization was the same as or different from that used for the local reaction. P.A.C.

619—Progrès Médical.

a. COICOU, F.—"Eléphantiasis et lymphangites en Haiti." 1935, No. 11, pp. 441-445. [1935.]

620—Progresos de la Clínica.

a. SUÑER, E. & LARREGLA, S.—"Valor de las pruebas de laboratorio en el diagnóstico de los quistes hidatídicos." XLIII, 581-584. [1935.]

621—Progress Notes, Animal Husbandry Division, Hawaii Agricultural Experiment Station.

a. HALL, M. C.—"The liver fluke problem in Hawaii." No. 12, 18 pp. [1935.]

622—Przegląd Weterynaryjny.

a. CENA, M. R.—"Przyczynek do rozpoznawania włosnicy y świń zapomocą odczynu strącania." XLVIII (5), 302-313. [1935.]
b. TRAWIŃSKI, A.—"Przypadek wągrzycy w mózgu człowieka." XLVIII (6), 389-391. [1935.]
c. KASPRZAK, Z.—"Przyczynek do wrażliwości włośni nieotorbionych w mięśie peklowanem na działanie solanki." XLVIII (9), 552-568. [1935.]

(622a) Using Trawiński's antigen, Cena shows the precipitation reaction to be specific in the diagnosis of trichinosis in swine. Positive diagnosis could be obtained as early as the 11th day after infestation. Such results are superior to those obtained with Bachman's antigen as this sometimes gives a positive result in animals free from trichinosis. P.A.C.

(622b) [Case of human cerebral cysticerciasis.]

(622c) In examining the effect of brine on the unencysted larvae in trichinous meat, Kasprzak finds that all such larvae are killed if the concentration of the brine exceeds 9·5%. Larvae can withstand the action of more dilute brine for a very long time without ill effects. P.A.C.

623—Queensland Agricultural Journal.

a. ROBERTS, F. H. S.—"Our present knowledge of the association of insects with disease." XLIV (4), 409-416. [1935.]

(623a) Roberts gives a résumé of our present knowledge of the association of insects with organisms producing diseases of virus, protozoal, bacterial and helminthic origin. Insect-borne diseases of unknown origin and diseases directly attributable to insects are also mentioned. The vectors and mechanical carriers of the more important trematodes, cestodes and nematodes of man, domestic animals and poultry are given. J.N.O.

624—Records of the Indian Museum.

a. DATTA, M. N. & PODDAR, T. N.—"Acanthocephalan parasites of certain fishes from Calcutta." XXXVII (2), 231-236. [1935.]
b. MAPLESTONE, P. A.—"The nematode genus *Deletrocephalus* Diesing, 1851." XXXVII (3), 335-336. [1935.]
c. GOGATE, B. S.—"On trematode parasites from *Ptyas korros* (Schlegel 1837) and *P. mucosus* (Linnaeus 1758) from Rangoon." XXXVII (4), 455-458. [1935.]

(624a) Acanthocephalan parasites are frequently found in fishes sold in the Calcutta markets. Descriptions are given of *Acanthogyrus acanthogyrus* Thapar, 1927 from *Labeo rohita* and *Catla catla*, and of *Pallisentis nagpurensis* (Bhalerao, 1931) from *Ophicephalus striatus*. R.T.L.

(624b) Maplestone agrees with Travassos (1933) that *Quasistrongylus rheae* Maplestone, 1932 is synonymous with *Deletrocephalus dimidiatus*

Diesing, 1851, but points out that this genus can be included in the subfamily Strongylinae Railliet, 1893 and that Travassos' revival of Railliet's subfamily Deletrocephalinae is unnecessary. A detailed definition of *Deletrocephalus* is given. R.T.L.

(624c) *Ostiolum mehrai* n. sp. is described and illustrated from the snakes *Ptyas korros* and *P. mucosus* in Rangoon. *Ommatobrephus lobatum* Mehra 1928 is also recorded from *P. mucosus*, and *O. folium* Thapar and Ali 1929 is shown to be its synonym. R.T.L.

625—Recueil de Médecine Vétérinaire.

a. CARPENTIER, G.—"Le diagnostic par la microscopie fécale, en clientèle et au régiment." CXI, 723-758. [1935.]

(625a) Carpentier commends to the veterinary practitioner the microscopic examination of faeces as an aid to diagnosis. He briefly outlines sedimentation and flotation methods, and describes seriatim the commoner helminth eggs and larvae and protozoal cysts of the horse, sheep and cattle, dog and cat, and (more briefly) pig, rabbit and poultry. B.G.P.

626—Report of the Cheltenham College Natural History Society for the year 1934.

a. TAYLOR, J. N.—"Nematode worms parasitic on the yellow ant (*Acanthamyops flavus* F.)." pp. 27-28. [1935.]

(626a) Taylor records parasitism of the males of the Yellow Ant (*Acanthamyops flavus* F.) by *Mermis myrmecophila*. Parasitized insects differ from normal males only by a slight distension of the abdomen and do not show the short-winged condition of mermithogynes. J.N.O.

627—Report (4th) of the Director of the Institute of Animal Pathology. Cambridge.

a. LAPAGE, G.—"The effects of some natural factors on the second ecdysis of nematode infective larvae." pp. 280-304. [1935.]

(627a) Continuing his observations on the factors which influence the second ecdysis of infective trichostrongylid larvae, Lapage indicates that the *p*H of their environment and the age of the larvae are interlinked. Acids cannot alone cause ecdysis but they may alter the permeability of the sheath in such a way that the osmotic process previously described by the author [see Helm. Abs., Vol. IV, Nos. 127e, 127f, 155e] can bring about ecdysis. Also, comparatively great and sudden temperature changes cannot alone cause ecdysis but they influence it indirectly by their effects on the activity of the larvae and on the acid-base equilibrium of the environment. A minimum of alkali seems necessary for exsheathment and the older the larvae the less alkali is required; thus older larvae will ecdyse even in feebly alkaline media such as tap water. Exsheathment observed in media containing saliva, pepsin, trypsin, rennin, etc., was due, not to these ferments, but to the inorganic salts present and it is argued that, within the host, the second ecdysis may be assisted, hindered or prevented by variations in the *p*H and salt content of those regions of the alimentary tract where this ecdysis

normally occurs ; and that the immunity or resistance of hosts to nematode infections may be determined by such local factors. Under natural conditions friction and mechanical damage can only effect the second ecdysis of larvae whose sheaths have already been altered by the above-mentioned factors, which would alone be sufficient to cause exsheathment. There is no evidence that friction and damage are essential for ecdysis, even in older larvae whose sheaths normally become brittle, or that the so-called boring movements of non-skin-penetrating larvae play an important part in the production of exsheathment. J.N.O.

628—Report. National Research Council of the Philippine Islands for 1935.

a. TUBANGUI, M.—" Medical and veterinary parasitology in the Philippines : solved and unsolved problems." pp. 486-491. [1935.]

629—Reports (25th-26th) of the Quebec Society for the Protection of Plants.

a. CAMERON, T. W. M.—" Nematodes and plants." [Reprint 10 pp.]

630—Résultats des Campagnes Scientifiques Accomplies par le Prince Albert I. Monaco.

a. GUIART, J.—" Cestodes parasites provenant des compagnes scientifiques de S.A.S. le Prince Albert Ier de Monaco (1886-1913)." XCI (5), 1-101. [1935.]

(630a) In this monograph of cestodes collected from marine mammals, birds and fishes, 51 species are described of which a number are new and several are larval forms. From *Delphis delphis*, Guiart records as new *Prosthecocotyla diplosoma* n. sp. and *P. pachysoma* n. sp. ; and from *Phoca* sp., *Plerocercoides portieri* n. sp. The others occur in various fishes. R.T.L.

631—Revista de Biologia e Hygiene. São Paulo.

a. VAZ, Z.—" Redescrição de *Arthrocephalus maxillaris* (Molin, 1860) necatorineo parasita de *Procyon cancrivorus*." VI (1), 9-12. [1935.]
b. PEREIRA, C.—" Sobre um Lepidonemidae Trav., 1919 e um Rhabdiasidae Raillet [Railliet] 1915 (Nematoda) novos." VI (1), 19-21. [1935.]

(631a) Vaz identifies material obtained from the intestine of *Procyon cancrivorus* with *Dochmius maxillaris* Molin, 1860. The species is redescribed and placed in the genus *Arthrocephalus*. D.O.M.

(631b) Pereira describes and figures two new species of nematode obtained from Brazilian animals : *Severianoia magna* n. sp., an oxyurid from the intestine of an undetermined species of wild Blattidae and *Strongyloides carini* n. sp., from the small intestine of the batrachian, *Leptodactylus gracilis*. T.G.

632—Revista de Chirurgie. Bucureşti.

a. POP, A., MURESAN, E. & NANA, A.—" Diagnosis and therapy of pulmonary hydatid cyst." XXXVIII, 1-12. [1935.]
b. IACOVLIESIC.—" Lobectomie dans un seul temps en plèvre libre pour écchinoccoçose et abcès putride du lobe inférieur." XXXVIII, 134-136. [1935.]

633—Revista do Departamento Nacional da Producção Animal.

a. OLIVEIRA CASTRO, G. M. DE.—" Notas sobre technica parasitologica." II (1/3), 131-136. [English summary p. 135.] [1935.]
b. ALMEIDA, J. LINS DE.—" Notas helminthologicas. I." II (1/3), 137-138. [1935.]
c. FREITAS, J. F. TEIXEIRA DE & ALMEIDA, J. LINS DE.—" Sobre um novo nematodeo parasito de ave domestica *Capillaria cairinae* n. sp." II (1/3), 139-141. [English summary p. 141.]

(633a) Oliveira Castro finds that a useful clearing agent for nematodes is made up from absolute alcohol 60 c.c., water 60 c.c. and sufficient phenol to give a refractive index of 1·453 (at 25°C.), i.e., bringing the solution up to about 245 c.c. This is much more rapid than glycerine and gives rise to no distortion, and specimens can be transferred directly to it from alcohol, and back. B.G.P.

(633b) Almeida reduces *Quasistrongylus rheae* Maplestone, 1932 to the synonymy of *Deletrocephalus dimidiatus* Diesing, 1851, and *Homoscaphis* Canavan, 1933 to the synonymy of *Odhneriotrema* Travassos, 1928.

B.G.P.

634—Revista Española de Cirugía.

a. MATA, R. DE.—" Un caso de quiste hidatídico del hígado abierto en estómago." XVII, 59-63. [1935.]

635—Revista Médica de Canarias.

a. BOSCH MILLARES, J.—" Parasitología de Gran Canaria." IV, 366-372. [1935.]

636—Revista Médica Cubana.

a. KOURÍ, P., CALVÓ FONSECA, R. & BASNUEVO, J. G.—" Porcentaje y distribución geográfica del parasitismo intestinal en Cuba (provincia de Pinar del Río)." XLVI, 981-990. [1935.]
b. KOURÍ, P., BASNUEVO, J. G. & CALVÓ FONSECA, R.—" Porcentaje y distribución geográfica del parasitismo intestinal en Cuba; Provincia: La Habana. Pueblo: Guanabacoa." XLVI, 1337-1345. [1935.]

637—Revista Médica del Rosario.

a. IMHOFF, J. D.—" El sondaje duodenal en el diagnóstico de algunas parasitosis intestinales (triquinosis, anquilostomiasis, etc.)." XXV, 983-988. [1935.]

638—Revista Médica Veracruzana.

a. DESCHAMPS, A.—" Un caso de apendicitis por oxiurosis." XV, p. 1592. [1935.]
b. SEGOVIA, A.—" Algunas estadísticas acerca de la helmintiasis en los niños de la ciudad de Veracruz." XV, 1695-1707. [1935.]

639—Revista de Medicina y Cirugia de la Habana.

a. CALVÓ FONSECA, R., KOURÍ, P. & BASNUEVO, J. G.—" Porcentaje / distribución geográfica del parasitismo intestinal en Cuba. Provincia de Pinar del Río. Pueblo: Consolación del Sur." XL, 519-529. [1935.]

b. CALVÓ FONSECA, R., KOURÍ, P. & BASNUEVO, J. G.—" Porcentaje y distribución geográfica del parasitismo intestinal en Cuba. Provincia de La Habana, ciudad de La Habana." XL, 564-572. [1935.]

640—Revista Medico-Cirurgica do Brasil.

a. FREITAS, J. F. TEIXEIRA DE & LENT, H.—" Sobre uma nova especie do genero *Trichostrongylus* Looss, 1905." XLIII (6), 180-181. [1935.]
b. LENT, H. & FREITAS, J. F. TEIXEIRA DE.—" Contribuição ao conhecimento da fauna helminthologica da Argentina. *Graphidioides mazzai* n. sp., parasito de *Galea leucoblephara* (Burm.)." XLIII (7/8), 225-227. [1935.]
c. FREITAS, J. F. TEIXEIRA DE & LENT, H.—" Quelques variations et anomalies bursaires observées chez *Viannaia viannai* Trav., 1914 et *Viannaia hamata* Trav., 1914." XLIII (9), 253-258. [1935.]
d. FREITAS, J. F. TEIXEIRA DE & LENT, H.—" Nota prévia sobre duas novas especies do genero *Capillaria* (Nematoda), e referencia a novos hospedadores de helminthos conhecidos." XLIII (10), 301-303. [1935.]
e. TRAVASSOS, L.—" Alguns novos generos e especies de Trichostrongylidae." XLIII (11), 345-361. [1935.]

(640a) Freitas & Lent describe *Trichostrongylus nagatyi* n. sp. from *Rhinchotus rufescens* in São Paulo. It closely resembles *T. pergracilis* but the spicules differ by having their distal ends recurved and drawn out to two rounded knobs. These are unequal, one being long and narrow and the other short and sturdy. P.A.C.

(640b) Lent & Freitas describe *Graphidioides mazzai* n. sp., a parasite of *Galea leucoblephara* in Argentina. Its closest affinities lie with *G. affinis* and *G. rudicaudatus*. It differs from the former in the shape of the spicules and in the great size of the two branches of the ovejector. It is differentiated from *G. rudicaudatus* also by the shape of the spicules and gubernaculum, the dorsal ray of the bursa and the form of the ovejector. P.A.C.

(640c) Freitas & Lent consider that the bursa of *Viannaia viannai* is a good characteristic for diagnosis in spite of considerable variation. Such variation usually occurs in the divisions of the dorsal rays, some of which are figured and described. P.A.C.

(640d) *Capillaria linsi* n. sp. is recorded from *Galictis vittata* and *C. pereirai* n. sp. from Molossidae. New hosts are given for *Heligmostrongylus sedecimradiatus*, *Aspidodera raillieti*, *Capillaria auritae*, *Skrjabinofilaria pricei* and *Brachylaemus opisthotrias*. R.T.L.

(640e) Travassos describes 8 new genera of Trichostrongylids from Edentata. *Macielia* n. g., related to *Cooperia*, is distinguished by the presence of an accessory bursal membrane. The spicules are of a characteristic shape. *M. macieli* n. sp. is the type species. *M. chagasi* is also described. *Delicata* n. g. approximates to *Molineus* but differs in the form of the dorsal ray and of the female tail. *D. delicata* n. sp. is the type species. *D. uncinata* n. sp., *D. variabilis* n. sp., *D. similis* n. sp. and *D. cameroni* n. sp. are also described. *Moennigia* n. g., containing *M. moennigi* n. sp., has spicules which divide into 3 points distally. *Pulchrostrongylus* n. g. with *P. complexus* n. sp. is related to *Delicata* but is distinguished by the disposition of the lateral and dorsal rays. The females are monodelphous. *Dasypostrongylus* n. g. with *D. filamentosus* n. sp. is distinguished from related genera by the position of the bursal rays. *Pintonema* n. g. is a larger genus containing *P. pintoi* n. sp., *P. intrusa* n. sp., *P. pulchra* n. sp., *P. pseudopulchra* n. sp. and a number of species

transferred from other genera. Difficulty in distinguishing the females was met, as all the species were together in the same host. The males can be distinguished from *Oswaldocruzia* and *Trichohelix*, its nearest relatives, by the appearance of the bursa. *Adolpholutzia* n. g. containing only *A. lutzi* n. sp. resembles *Oswaldocruzia* and *Schulzia* but is differentiated by the position and size of the dorsal ray and by the shape of the spicules. *Paracooperia* n. g. from the stomach of ruminants is described with type species *P. serrata* transferred from the genus *Cooperia*. *Oswaldocruzia mazzai* n. sp. from *Bufo* sp., *Travassostrongylus orloffi* n. sp. and *T. tertius* n. sp. from edentates are described. P.A.C.

641—Revista de Parasitologia, Clínica y Laboratorio.

a. KOURÍ, P. & VALVERDE, A.—" Nuevo caso cubano de Fasciolosis hepática humana. Curación por la emetina. Estado actual de la emetinoterapia en esta parasitosis." I (1), 1-15. [1935.]
b. VIVÓ, J.—" Existe la acidosis verminosa ?" I (1), 16-21. [1935.]
c. KOURÍ, P., BASNUEVO, J. G. & SUTTER, R.—" Sobre un caso interesante de ascaridiosis." I (1), 32-36. [1935.]
d. KOURÍ, P. & FRADE, A. DEL.—" La clonorchiasis en la ciudad de la Habana." I (1), 37-52. [English summary p. 50.] [1935.]
e. KOURÍ, P.—" Técnica para el examen de la bilis, obtenida por intubación duodenal, en el diagnóstico de certeza y en el control terapéutico de la Fasciolosis hepática." I (1), 53-67. [1935.]
f. PÉREZ VIGUERAS, I.—" Dos especies nuevas del género Tetrameres (Nemátoda)." I (2), 117-120. [1935.]
g. KOURÍ, P., BASNUEVO, J. G.& DRAKE, T.—" Un caso más de Fasciolosis hepática humana adquirida en Cuba. Curación con el Clorhidrato de emetina." I (2), 134-150. [1935.]
h. PÉREZ VIGUERAS, I.—" Sobre la presencia en Cuba de *Diaschistorchis pandus* (Braun) (Trematoda) parásito de *Chelonia imbricata*." I (2), 167-168. [1935.]
i. CALVO FONSECA, R., KOURÍ, P. & BASNUEVO, J. G.—" Porcentaje y distribución geográfica del parasitismo intestinal en Cuba." I (2), 178-187. [1935.]
j. PÉREZ VIGUERAS, I.—" Sobre la validez de la especie *Atractis cruciata* Linstow 1902." I (2), 188-190. [1935.]
k. KOURÍ, P., BASNUEVO, J. G., ALVARÉ, L. & LESCANO, O.—" Técnica para el estudio de la anatomía de la *Fasciola hepática*." I (2), 191-195. [1935.]
l. CALVO FONSECA, R., KOURÍ, P. & BASNUEVO, J. G.—" Porcentaje y distribución geográfica del parasitismo intestinal en Cuba (Provincia de Pinar del Río)." I (2), 206-211. [1935.]

(641f) Pérez Vigueras describes and figures *Tetrameres microspinosa* n. sp. from *Leucophoyx thula thula* and *T. fermini* n. sp. from *Butorides virescens maculatus*, both from the Pinar del Río Province. B.G.P.

(641j) From an examination of new material of *Atractis cruciata* Linstow, 1902 from the iguana *Cyclura macleayi*, Pérez Vigueras concludes that it is a species distinct from *A. opeatura* Leidy with which it has been identified by Railliet & Henry and Walton. B.G.P.

642—Revista de Tuberculosis del Uruguay.

a. PIAGGIO BLANCO, R. A. & GARCÍA CAPURRO, F.—" Quiste hidático de la cara superior del hígado desarrollado en la cavidad pleural derecha." IV (6), 504-508. [1935.]

b. FIERRO VIGNOLI, M.—" Consideraciones sobre la hemoptisis por quiste hidático." IV (6), 514-519. [1935.]
c. FILIPPINI ROSSI, E. & PASTOR, E.—" Hidatidosis pulmonar secundaria a la ruptura de un quiste hidático. Siembra broncógena ; dos observaciones." V (2), 157-163. [1935.]

643—Revue Belge des Sciences Médicales.

a. APPELMANS, M.—" Les troubles visuels dans l'onchocercose africaine." VII (7), 525-539. [1935.]

(643a) Appelmans recognizes three successive stages in the development of human onchocerciasis : (i) nodule formation, (ii) skin lesions, and (iii) ocular lesions, which are essentially similar in nature to those of the skin. The disease in Africa does not appear to be fundamentally different from that in America. Symptomatology and pathological anatomy are described. B.G.P.

644—Revue Française de Pédiatrie.

a. BELLOCQ, G. P.—" L'oxyurose chez le nourrisson." XI (6), 785-796. [1935.]

645—Revue Médicale de la Suisse Romande.

a. BRUMPT, E.—" Contribution à l'étude de l'action cancérigène des helminthes. Rôle du *Gongylonema neoplasticum*." LV (2/3), 66-75. [1935.]

(645a) From a review of the literature and from personal observations on a series of experimental infections of white mice with *Gongylonema neoplasticum* Brumpt considers that these parasites can provoke a pathological effect varying with the country, age, sex, number and infected food, but he is unable to decide their relative significance. Environment appears to play the most important rôle. R.T.L.

646—Revue de Pathologie Comparée et d'Hygiène Générale.

a. FOVEAU DE COURMELLES,—" Comment pénétrant les ascaris chez les très jeunes chiens ? " XXXV (470), 1332-1336. [1935.]

(646a) Foveau de Courmelles reports a case in which the puppies of two successive litters passed a number of ascarid worms, whereas the bitch treated at the same time gave a negative result. Various explanations of this anomalous result are considered by the author. J.W.G.L.

647—Revue Suisse de Zoologie.

a. HSÜ, H. F.—" Contributions à l'étude des cestodes de Chine." XLII (4), 447-570. [1935.]
b. DUBOIS, G.—" Étude des strigéidés de la collection du Département de Parasitologie de l'Université Hébraïque de Jérusalem." XLII (4), 571-585. [1935.]
c. DUBOIS, G.—" *Neodiplostomum impraeputiatum* Dubois, 1934, nouveau parasite d'oiseaux (Trematoda : Alariidae)." XLII (4), 587-592. [1935.]

(647a) Hsü describes *Oochoristica hainanensis* n. sp., and redescribes from type material *O. brasiliensis*, *O. breslaui*, *O. cryptobothrium*, *O. lagrangei* and *O. theileri*. Questions of specific characters and synonomy within this

genus are discussed. A new genus *Khawia* is erected to include *K. sinensis* n. sp. and *K.* (— *Caryophyllaeus*) *japonensis*, both from *Cyprinus carpio*. The family Nematotaeniidae is discussed, and a new genus, *Baerietta* described with two species, *B. baeri* n. sp. and *B.* (= *Nematotaenia*) *jägerskiöldi*. Two new genera of Dilepididae are created, namely *Paradilepis* n. g., with two species, *P. duboisi* n. sp., and *P.* (= *Dilepis*) *scolecina*; and *Ophiovalipora houdemeri* n. g., n. sp. Other descriptions include *Ophiotaenia nankingensis* n. sp., *Diphyllobothrium fuhrmanni* n. sp., *Deltokeras delachauxi* n. sp., *Hymenolepis peipingensis* n. sp., *Raillietina* (*Paroniella*) *huebscheri* n. sp., and a new parasite of the rat, *R.* (*Raillietina*) *sinensis* n. sp. A list is appended of all cestodes so far reported from China. E.M.S.

(647b) Dubois redescribes here four strigeids originally described by himself in 1934 in " Actes de la Société Helvétique des Sciences Naturelles " pp. 374-375. They are: *Apharyngostrigea flexilis*, *Cotylurus hebraicus*, *C. syrius* and *Prohemistomum syriacum*. A table is given to separate the latter from its nearest relative, *P. industrium* Tubangui. E.M.S.

648—Revue Vétérinaire et Journal de Médecine Vétérinaire et de Zootechnie.

a. MOUSSARON, A.—" Téniasis mortel chez la jument." LXXXVII, 619-620. [1935.]

(648a) Moussaron records heavy infestation by *Anoplocephala perfoliata* as the cause of the death of two mares and gives a short account of the symptoms and post mortem findings. J.W.G.L.

649—Revue Vétérinaire Militaire.

a. HOUDEMER, E.—" Le problème de l'anémie vermineuse des équidés." XIX, 409-441. [1935.]

b. LESBOUYRIES, M.—" Le pigeon voyageur et ses principales maladies." XIX, 443-453. [1935.]

(649a) Houdemer has made a survey of the literature relating to verminous anaemia in the horse caused by cylicostomes. He summarizes the geographical distribution of the disease in France and shows that the conditions to which army horses are subjected aggravate the disease and cause heavy economic loss to the French military establishment. For the control of the disease he recommends the adoption of various hygienic measures, together with regular anthelmintic treatment. J.W.G.L.

(649b) Lesbouyries states that the important helminth parasites of carrier pigeons are *Capillaria columbae* and *Ascaridia columbae*, both of which cause symptoms of cachexia. Internally there is enteritis with possible haemorrhages into the intestine. Diagnosis can only be made by finding the eggs in the stool. There may be repercussions in the central nervous system in heavy infestations. P.A.C.

650—Revue de Zoologie et de Botanique Africaines.

a. SANDGROUND, J. H.—" A redescription of *Filaria pertenue* Rodhain 1919 and the creation of a new genus, *Protofilaria*, for its reception." XXVII (2), 246-253. [1935.]

b. VUYLSTEKE, C.—" Nématodes parasites de l'okapi." XXVII (3/4), 313-318. [1935.]
c. VUYLSTEKE, C.—" Étude de quelques nématodes parasites de l'éléphant." XXVII (3/4), 319-325. [1935.]

(650a) Recent findings in tropical and subtropical Africa that various forms of onchocerciasis enjoy a wide distribution in cattle and has been found in several species of antelopes (*Hippotragus* spp. and *Cephalophus* spp.) made it desirable to establish the phylogenetic affinities of *Filaria pertenue* Rodhain, 1919, discovered in *Cephalophus sylvicultor*. After describing *Protofilaria pertenue* (Rodhain, 1919) Sandground gives his reasons for transferring it from *Filaria*. In several respects *F. pertenue* differs from *F. martis* and resembles *F. setariosa* but it shows no greater affinity with the latter species than it does with the former. Certainly the 3 species cannot be considered as congeneric without necessitating radical emendations in the generic diagnosis. In *F. pertenue* the cephalic papillae persist in a manner that is unique in the family, exhibiting a primitiveness that is reminiscent of the Spiruroid genus *Thelazia*. Consequently Sandground proposes to refer *F. pertenue* to a new genus *Protofilaria* which he defines as follows : Filariinae—mouth without lips ; full complement of 6 papillae in an internal ring and 8 submedian papillae in an external ring ; amphidial pores slit-like. Cuticle transversely striated. Lateral alae and cervical papillae absent. Stoma shallow. Oesophagus simple. Tail short and devoid of terminal appendages. Male without caudal alae. Spicules dissimilar and unequal. Caudal papillae minute and reduced in number. Female viviparous : vulva in oral region, ovejector well developed. A.E.F.

(650b) The following species are recorded from *Okapia johnstoni* in the Congo : *Oesophagostomum rodhaini* n. sp., *Parabronema okapiae* n. sp. and *Trichuris globulosa* v.L.1901. R.T.L.

(650c) Seven species of nematodes from the African elephant are described, viz. : *Amira* sp. ?, *Quilonia africana*, *Q. apiensis*, *Murshidia longicaudata*, *M. hadia*, *Grammocephalus clathratus* and *Syngamus loxodontis* n. sp. This new gapeworm is nearly related to *S. indicus*, differing in the structure and dimensions of the bursa and the greater size of the buccal capsule. R.T.L.

651—Rivista Sanitaria Siciliana.

a. CATALIOTTI, F.—" L'echinococco della tiroide." XXIII (14), 1064-1072. [1935.]

652—Schriften der Physikalisch-Ökonomischen Gesellschaft zu Königsberg.

a. SZIDAT.—" Neue Entdeckungen aus dem Gebiet der Parasiten des Menschen." LXVIII (3/4), 294-298. [1935.]

(652a) Szidat describes briefly recent advances in human helminthology in Germany. He mentions the work of Mehl on *Limnaea truncatula*. Recent work on *Dicrocoelium dendriticum* by Nöller and Vogel, and later by Mattes in Marburg, showed *Cercaria vitrina* to be the larval stage. Work on the life-history of *Opisthorchis felineus*, and on Bothriocephalus anaemia (Vogel and Wigand) are also mentioned. Szidat concludes with a summary of views

on the mode of spread of helminths in Germany. It is concluded that the spread of both Ascaris and Trichuris is mainly conditioned by the presence or absence of suitable sanitary conveniences. A.E.F.

653—Schweizer Archiv für Tierheilkunde.

a. BENOIT, R.—" Contribution à l'étude des nodules et des kystes parasitaires du foie chez le cheval." LXXVII (9), 462-470. [1935.]
b. GALLI-VALERIO, B.—" Notes parasitologiques." LXXVII (12), 643-647. [1935.]

(653a) Parasitic nodules have frequently been recorded in the liver of horses due to the presence of trematodes and nematodes. At Lausanne 37% of the horses slaughtered in the abattoirs show these nodules. In 13·5% of the nodules examined Benoit has found eggs of *Fasciola hepatica*. Nematodes were exceedingly rare. In 1·8% there were cysts due to Echinococcus and in 2·5% foreign bodies originating from the gut gave rise to nodules. R.T.L.

(653b) Galli-Valerio illustrates larval tapeworms found encysted in *Aphodius obscurus* which he believes to be the early stages of *Cittotaenia marmotae*. He also describes briefly an enteritis in *Cypselus apus* due to enormous numbers of *Plagiorchis maculosus*. R.T.L.

654—Science Reports of the Tôhoku Imperial University. Series IV. Biology.

a. TORYU, Y.—" Contributions to the physiology of the Ascaris, III. Survival and glycogen content of the Ascaris, *Ascaris megalocephala* Cloq., in presence and absence of oxygen." X (2), 361-375. [1935.]

(654a) Toryu has carried out experiments in vitro with *Ascaris megalocephala* which show that the presence of carbon dioxide is favourable to the period of survival of the worm, whereas the presence of oxygen is unfavourable. Under anaerobic conditions, glycogen consumption is almost entirely confined to the first half of the period of survival, whilst under aerobic conditions it continues throughout the entire period. During starvation the glycogen consumed is that stored in muscle cells and developing young reproductive cells, but not that stored in the adult reproductive cells. The presence of valeric, lactic and propionic acids in the liquid around the worms, suggests that the decomposition of glycogen takes place by a fermentation process. R.H.H.

655—Science Reports of the Tokyo Bunrika Daigaku. Section B.

a. FUKUI, T. & OGATA, T.—" Note brève sur un nouveau trématode *Tetrochetus hamadai* provenant du *Spheroides spadiceus*." II (Report No. 36), 149-154. [1935.]

656—Scientific Agriculture.

a. PUTNAM, D. F. & CHAPMAN, L. J.—" Oat seedling diseases in Ontario. I. The oat nematode *Heterodera schachtii* Schm." XV (9), 633-651. [1935.]

(656a) Putnam & Chapman record the occurrence of the oat strain of *Heterodera schachtii* distributed over an area of about 30 square miles in

Ontario. Although first diagnosed in 1933 the infection is one of at least 10 years standing. A detailed account of the symptoms is given. Soil surveys showed that in 90% of cases the infection occurred in silty clay loam; fewer infected areas and less damage to crops were found in light soils. Experiments to control the disease by means of sulphur, formaldehyde, acetic acid, pyroligneous acid and a wide range of fertilizer dressings proved useless. M.J.T.

657—Semana Médica.

a. GRAVANO, L.—"Tumor benigno del diafragma (salvando un error de diagnóstico)." XLII (36), 705-709. [1935.]
b. NIÑO, F. L.—"Triquinosis experimental en la rata." XLII (41), 1045-1059. [1935.]
c. VALLARINO, D. & CICHERO, C.—"Quiste calcificado de hígado." XLII (47), 1565-1567. [1935.]

658—Sinensia. Contributions from the Metropolitan Museum of Natural History, Nanking.

a. HU, S. P.—"On the intestinal worms of goats in Nanking." VI (6), 698-700. [1935.]

659—Sitzungsberichte der Gesellschaft Naturforschender Freunde zu Berlin.

a. WETZEL, R.—"Die Beziehungen parasitischer Würmer zum Wirtstier." Year 1935 (8/10), 291-304. [1935.]

(659a) Wetzel, in an interesting discussion of the host-parasite relationship, summarizes much recent work on the mechanical effects of parasites, effects through deprivation of food, and effects of the parasite's excretions and secretions on the host, and the protective responses thereby induced. He sees the relationship as a precarious equilibrium which can be upset in favour of either the host or the parasite. The discussion touches upon aspects of physiology, pathogenesis and immunity too numerous to be detailed here. B.G.P.

660—Skandinavisk Veterinär-Tidskrift.

a. PLAZIKOWSKI, U.—"Sugmaskar som orsak till enzootiskt uppträdande äggledareinflammation hos höns." Year 1935, 731-749. [English summary p. 748.] [1935.]

(660a) Plazikowski describes inflammation of the oviduct of hens in Sweden caused by the presence of *Prosthogonimus pellucidus*. The disease is prevalent in early summer and usually runs a fatal course, death occurring within 24 hours after the appearance of symptoms. It is suggested that snails are an intermediate host. P.A.C.

661—South African Journal of Science.

a. THEILER, G.—"Some recent developments in the study of parasitic worms." XXXII, 49-71. [1935.]

(661a) In her presidential address to Section D of the South African Association for the Advancement of Science, Theiler reviews the more recent developments in helminthology and shows that the modern trend is towards the elucidation of problems on host parasite relationships.

Although researches on life-histories are still claiming the attention of helminthologists, the review shows that important contributions have already been made to our knowledge of problems such as the physiology of the host and that of the parasite, the host-responses, the pathogenicity of the parasite and the bionomics of its developmental stages. D.O.M.

662—Sovetskaya Khirurgiya.

a. MILCHIK, M. I.—[Case of echinococcosis of muscles of leg.] No. 7, 150-151. [1935.]
b. MELNIKOV, A.—[Surgical therapy of echinococcosis.] No. 10, 3-19. [1935.]

663—Sovetskaya Vrachebnaya Gazeta.

a. KALYUS, V. A.—[Diagnosis of trichinosis in man.] 1935, pp. 1907-1912. [1935.]

664—Sovetskiy Vestnik Oftalmologii.

a. KOLENKO, A. B.—[Case of subretinal cysticercosis cured by roentgen rays.] VII, 393-397. [1935.]

665—Taiwan Igakkai Zasshi.

a. TO, S. & KO, B.—" Erfahrungen in der Behandlung der Lungen-Distomiasis mit Carpain." XXXIV (12), 2070-2076. [In Japanese: German summary p. 2077.] [1935.]

(665a) To & Ko found that, in two untreated cases of pulmonary distomiasis, subcutaneous injections of carpain hydrochloride in physiological saline effected a complete cure: symptoms disappeared and no more ova were found. In two cases previously treated with Emetine, the cure was incomplete. The drug was used in 5% solution of which daily injections of from 0·5 c.c. to 2·0 c.c. were given up to a total of 1 g. or less. B.G.P.

666—Technical Bulletin. Michigan Agricultural Experiment Station.

a. STAFSETH, H. J.—" On the control of tapeworm infestation in chickens with notes on the pathology of the intestines of the hosts." No. 148, 46 pp. [1935.]

(666a) Stafseth recommends the use of iodine as a vermicide in birds. It kills strobilae of tapeworms and nematodes immediately, but a second or third dosing is often necessary to kill young stages which may have been located deep in mucosa, between the villi. Iodine fails to penetrate deeply into the mucosa. *Raillietina cesticillus* and *Hymenolepis carioca*, common parasites in Michigan, produce a reaction which is described. P.A.C.

667—Technical Bulletin. United States Department of Agriculture.

a. ALICATA, J. E.—"Early developmental stages of nematodes occurring in swine." No. 489, 96 pp. [1935.]

(667a) In his studies on the nematode parasites of swine, Alicata has paid particular attention to the morphology and bionomics of the early larval stages. New intermediate hosts are reported for *Gongylonema pulchrum*, *Ascarops strongylina* and *Physocephalus sexalatus*, and *Metastrongylus salmi* was successfully reared to the infective stage in earthworms. The development of the male and female reproductive organs were traced in the four larval stages of *Hyostrongylus rubidus* and the author shows how sex can be differentiated in the pre-parasitic larval stages by the position of the posterior cell of the group of giant cells in the body cavity. In addition to the numerous illustrations the bulletin contains useful tables giving the differential characters and measurements of the eggs and infective larvae. D.O.M.

668—Trabalho do Centro de Estudos e Prophylaxia da Lepra.

a. PEREIRA, P. C. R. & ANDERSON, H. H.—"O emprego do 'Hexylresorcinol' como antihelmintico." [Reprint 7 pp.] [1935.]

(668a) Pereira & Anderson have found hexylresorcinol useful as an ascaricide, but ineffective against other helminths. Of 21 patients harbouring *Ascaris lumbricoides* 20 were cured by dosing with this drug in the method recommended by Lamson and his associates. Of 20 cases with hookworm only 2 were cured by this method. No other intestinal helminths were removed by the drug. K.S.

669—Transactiones Societatis Pathologicae Japonicae.

a. TSUNODA, T., SHIRAI, S. & NAKAMOTO, T.—"Über den Infektionsmodus der Taenia polycephalica canina japonica sowie die Unterschiede zwischen dem Blasenwurme der Taenia polycephalica canina jap. und dem der T. multiceps serialis." XXV, 155-158. [In German.] [1935.]

b. EGUCHI, S. & KITAYAMA, H.—"Über die Beziehung zwischen dem Tropismus von Ankylostomalarven und der Artspezifität des Serums sowie der Immunität." XXV, 158-162. [In Japanese.] [1935.]

(669a) A coernurus occurs in wild hares in Japan, usually muscular or subcutaneous in location, which appears to be specifically distinct from *Multiceps serialis*. The cyst and contained scolices are smaller, the cyst-wall is thinner, and daughter-cysts are frequent. Tsunoda, Shirai & Nakamoto describe in detail the adult, produced experimentally in the dog, and call it "Taenia polycephalica canina japonica." Occasionally hares harbour both species of coenurus. B.G.P.

670—Transactions of the American Association of Genito-Urinary Surgeons.

a. STEVENS, A. R.—"Schistosomiasis involvement of the upper urinary tract; report of patient with papillomata of renal pelvis, ureter, and later of bladder." XXVIII, 275-285. [1935.]

671—Transactions of the American Laryngological Association.

a. IMPERATORI, C. J.—" A case of malignant laryngeal growth implanted on tissues, the deeper layers of which were infected with trichini." LVII, p. 242. [1935.]

672—Transactions on the Dynamics of Development.

a. ZAWADOWSKY, M. M. & VOROBIEVA, E. I.—" The ultra-violet light of the quartz-lamp as a prophylactic factor in the struggle against Ascaridosis. (Preliminary report)." IX, 331-339. [In Russian : English summary p. 340.] [1935.]

b. ZVJAGUINZEV, S. N.—" Investigations on the biology of eggs and the distribution of Trichostrongylidae larvae in sheep farms. Material for working out of sanitary prophylactic measures against trichostrongylidosis." IX, 341-353. [In Russian : English summary p. 354.] [1935.]

c. MALEVITCH, J. J.—" On the infection of lambs with helminthes." IX, 355-359. [In Russian : English summary p. 360.] [1935.]

(672b) In his field studies on the eggs and larvae of sheep helminths in Russia Zvjaguinzev found that, although pastures may contain viable eggs of the trichostrongyles of sheep, no infection can take place in winter as the eggs do not hatch and that in the spring when pasturing begins the ground is free from infective larvae.

The development of the eggs and larvae on the Steppes in summer depends on the presence of vegetation to provide suitable conditions for such development and even when larvae do hatch their development to the infective stage is frequently delayed. D.O.M.

(672c) Malevitch found that lambs kept in clean pens and fed with grass from infected fields became infected with strongyles and *Moniezia* but when kept entirely on a dry clean fold there was no infection except with *Strongyloides*. Uninfected lambs placed on infected pastures passed strongyle eggs on the 18th day while *Moniezia* eggs appeared on the 35th to 36th day. D.O.M.

673—Transactions of the Pasteur Institute of Epidemiology and Bacteriology in Leningrad.

a. STROM, G. K.—" Incidence of helminthiasis among the population of the Kola Peninsula." II, 110-116. [In Russian : English summary p. 228.] [1935.]

b. DANSKER, V. N., WITE, L. E. & ALEXANDER, L. L.—" The results of an examination of a group of nutrition workers of Leningrad as helminth-carriers." II, 117-122. [In Russian : English summary pp. 228-229.] [1935.]

c. PHILIPTCHENKO, A. A. & DANSKER, V. N.—" On epidemiology of ascariasis." II, 123-147. [In Russian : English summary pp. 229-231.] [1935.]

d. KHAUSTOV, J. M.—" Vegetables as a factor in transmission of *Trichocephalus trichiuris* [*trichiurus*]." II, 148-152. [In Russian : English summary p. 231.] 1935.]

e. SHTCHOUPAKOV, J. G.—" On the possibility of reinfection of muscle tissue with *Trichinella spiralis*. (On the question of immunity in trichiniasis)." II, 153-162. [In Russian : English summary pp. 231-232.] [1935.]

f. WITE, L.—" On the problem of the effectiveness of phenol disinfectants in respect of *Ascaris* and *Trichocephalus* eggs." II, 163-168. [In Russian : English summary pp. 232-233.] [1935.]

g. ALEXANDER, L. L. & DANSKER, A. N.—" Flies as transmitting agents in the spread of intestinal parasites." II, 169-179. [In Russian: English summary pp. 233-234.] [1935.]

(673b) Between 1931-1933 Dansker, Wite & Alexander have examined about 1,500 workers of various food enterprises in Leningrad for helminth infestations. Up to 50% of these people were carriers and they have evidence that the incidence of *Enterobius vermicularis* is increasing while in 1933 there seemed to be a decrease in carriers of *Ascaris*. P.A.C.

(673c) Philiptchenko & Dansker find that undeveloped eggs of *Ascaris lumbricoides* can withstand very low temperatures and considerable fluctuation of temperature. They are, however, much more susceptible to such changes when they have developed to the infective stage. Desiccation soon proves lethal to all eggs. Heavy new infections occur in winter and spring and are due to the pollution of living quarters with eggs. The primary method of infection is by direct contact with the environment and with carriers. P.A.C.

(673d) Khaustov thoroughly washed a large variety of fruit and vegetables and after centrifuging the washing water, examined the sediment for helminth eggs. Out of 650 analyses there were found 9 eggs of *Trichocephalus trichiurus*, 6 eggs of *Ascaris lumbricoides* and 1 egg of *Enterobius vermicularis*. These were all found on carrots or cucumbers. P.A.C.

(673e) Shtchoupakov finds that in trichiniasis there develops an immunity within the muscles as well as one in the intestine. Rats were re-infected with trichina and during the first few days there was a high mortality. This was probably caused by chemical changes in the intestinal media as a result of the first infection. A few which reached sexual maturity produced embryos, the majority of which perished before they could penetrate the circulatory system. Even if they succeeded so far in the life cycle, very few were able to penetrate the muscles unless the first infection was too light to cause an immunity. P.A.C.

(673f) Wite finds that the eggs of *Ascaris* and *Trichocephalus* are highly resistant to the action of various phenol compounds which are in general use as disinfectants. A mixture containing 20% of potassium soft soap, 15% turpentine, 15% lysol and 50% solvent was only lethal after at least 4 days immersion. Lysol 8% or 10% and carbolic acid 4·5% solution had little effect on eggs in the first half hour—a few *Ascaris* eggs were killed and others showed a retarded development. P.A.C.

(673g) Alexander & Dansker are of the opinion that house flies are transmitters of helminth eggs and protozoan cysts. *Ascaris*, *Trichocephalus*, *Enterobius*, *Diphyllobothrium*, *Taenia* spp. and *Hymenolepis* eggs and onchospheres were found to be ingested and subsequently disseminated in the droppings of the flies. The degree of transmission depended on the size of the egg and the power of the flies to ingest it. The eggs did not seem to be carried on the surface of the body. P.A.C.

674—Travaux et Comptes Rendus. Institut de Recherches des Forêts d'État à Varsovie.

a. KARPINSKI, J. J.—" Les causes qui limitent la reproduction de Bostryches typographes (*Ips typographus* L. et *Ips duplicatus* Sahlb.) dans le forêt primitive." A, No. 15, 1-86. [1935.]

(674a) Karpinski has investigated the bionomics of two bark-beetles, *Ips typographus L.* and *I. duplicatus* Sahlb., on spruce in the Forest of Bialowies during September-November, 1933. In a separate section the author discusses the natural factors, such as conditions of overcrowding, woodpeckers, nematodes, predacious insects, etc., which control the increase of beetle population in the forest and summarizes the effects of each factor in a table. Little information is given about nematodes which are reported as common on the adults, larvae and pupae and in the galleries of the beetles. A list of the worms found is promised for publication after the species have been identified. J.N.O.

675—Travaux de la Filiale de l'Académie des Sciences de l'USSR au Tadjykistan.

a. SMIRNOV, G. G.—"Sur l'hématophagie des nématodes parasitiques." No. 5, 95-117. [In Russian.] [1935.]

(675a) Reviewing the phenomenon of haematophagia among the various superfamilies of parasitic nematodes, Smirnov finds that it is usually facultative. Where obligatory, it is of great pathological importance to the host. B.G.P.

676—Travaux de la Station Zoologique de Wimereux.

a. GALLIEN, L.—"Recherches expérimentales sur le dimorphisme évolutif et la biologie de *Polystomum integerrimum* Fröhl." XII (1), 1-181. [1935.]

(676a) Gallien deals with all aspects of the common trematode of the urinary bladder of *Rana temporaria*. His interest centres in the "néoténique"—the mature sexual form produced when the gyrodactyloid larva happens to attack a very young tadpole. His numerous experiments throw considerable light on the laws governing the incidence of this form, and he is able to show that the high percentage infestation with this trematode is due to its capacity to produce a "néoténique" form. E.M.S.

677—Tunisie Médicale.

a. BRUN, R. G.—"Quelques réflexions cliniques et thérapeutiques sur les kystes hydatique de la rate." XXIX (1), 1-12. [1935.]
b. BROC, R. & MAMI, A.—"Kyste hydatique calcifié du foie - petits abcès-cancer sus-vatérien." XXIX (3), 108-109. [1935.]
c. LEHUCHER & ROLLIN.—"Un cas de kyste hydatique de l'ovaire." XXIX (10), 468-470. [1935.]
d. BROC, R. & MAMI, A.—"Schistosomiase intestinale." XXIX (10), 477-478. [1935.]

678—Union Médicale du Canada.

a. LAPIERRE, G., MAJOR, W. & MARTIN, P.—"Un cas mortel de trichinose." LXIV, 1127-1136. [1935.]

679—University of Wyoming Publications.

a. HONESS, R. F.—"Studies on the tapeworms of the Black Hills cottontail rabbit, *Sylvilagus nuttali grangeri* (Allen) with special reference to the life history of *Cittotaenia variabilis* Stiles." II (1), 1-10. [1935.]

b. SIMON, J. R.—"A new species of nematode, *Bulbodacnitis scotti*, from the trout, *Salmo lewisi* (Girard)." II (2), 11-15. [1935.]

(679a) Honess is led to the opinion that an intermediate host is essential in the life cycle of *Cittotaenia variabilis* by observing the growth and changes in density of the scolex in the final host and comparing them with the egg stage. The increase in mass and change in structure from the hexacanth embryo to the adult scolex is such that the change must take place in a nutritive medium permitting growth. P.A.C.

(679b) Simon describes *Bulbodacnitis scotti* from *Salmo lewisi* in Wyoming. It differs from *B. globosa* and *B. bulbosa* in its dimensions, mainly in its length, the length of the female tail and the spicules, and in the small size of the bulb on the head. P.A.C.

680—Veterinäre Gesundheitsdienst.

(Published as Prager Tierärztliches Archiv. Sonderheft 1.)

a. MARTIN, W.—"Technische Neuerungen für den Trichinenschau-Grossbetrieb." pp. 30-36. [1935.]

(680a) Martin gives an account of improvements, which have been developed at Aussig, in the technique and apparatus used in the detection of trichinosis in slaughtered swine. Carcase and pluck, although hung separately, are identified by numbered discs and duplicate preparations of muscle tissue in compressoria examined by two observers. Refinements in the trichinoscope and its related apparatus are also discussed. J.N.O.

681—Veterinarski Arhiv.

a. BABIĆ, I.—"O nalazima entoparazitičkih crva kod slatkovodnih riba." V (8), 356-366. [German summary pp. 366-367.] [1935.]

(681a) Babić analyses the results of helminthic examination of 165 fish from the Zirknitzersee, and from hatcheries at Prijedor (pike) and at Ogulin (rainbow trout). He records among other forms, 4 trematodes, 6 cestodes, 1 nematode and 5 acanthocephala. He claims that *Triaenophorus nodulosus* is not the cause of "Pest" of pike, since many diseased fish are quite free from the parasite. The fish from the Zirknitzersee showed a higher percentage of *Triaenophorus* and other helminths in sound than in diseased specimens. E.M.S.

682—Veterinary Bulletin. Civil Veterinary Department. Punjab.

a. HANDA, B. N.—"Some important diseases of sheep in the low-land, inundated, and water-logged areas of the Punjab, with a particular reference to the control measures at the Government Cattle Farm, Hissar." No. 3, 12 pp. [1935.]

683—Veterinary Journal.

a. DEW, H. R.—"Hydatid disease. A general survey." XCI (11), 481-493. [1935.]

(683a) [This article is reprinted from Med. Pr. See above No. 584a.]

684—Veterinary Medicine.

a. DAMON, A.—" Internal parasites of the dog." XXX (5), 217-220. [1935.]
b. LEWITUS, V.—" Drugs used in veterinary medicine. V. Santonica—the source of santonin." XXX (5), 221-223. [1935.]
c. GILYARD, R. T.—" The common palisade worm; *Strongylus vulgaris*." XXX (6), 254-255. [1935.]
d. SCHAFER, F. N.—" Ascariasis of horses." XXX (8), 353-354. [1935.]
e. BOZICEVICH, J. & WRIGHT, W. H.—" Carbon disulphide for the removal of stomach worms from swine." XXX (9), 390-393. [1935.]
f. STEINBACH, F. G.—" Arsenic and areca nut not dependable in filariasis." XXX (9), p. 413. [1935.]
g. MILLS, R. H.—" Bone weakness due to nematode infestation in animals on ladino clover pasture." XXX (10), 424-428. [1935.]
h. STAFFORD, C. D.—" Common parasites of the cat." XXX (10), 438-441. [1935.]
i. HORNING, J. G.—" The treatment of whipworm infestation in dogs." XXX (11), 480-482. [1935.]
j. DIBBELL, E. B.—" Handling heart worm disease in practice." XXX (11), 493-499. [1935.]
k. EHRLICH, D.—" Tetrachlorethylene in the treatment of hookworms and round worms." XXX (12), 525-526. [1935.]
l. HINKLE, jr., T. C.—" Unusual tapeworm cysts in a rabbit." XXX (12), p. 529. [1935.]

(684b) Lewitus describes the method of preparation and properties of santonin, the anthelmintic constituent of Santonica. The therapeutics and toxicology of the drug are also discussed. R.H.H.

(684e) Bozicevich & Wright find that carbon disulphide is a useful anthelmintic for stomach worms in swine when administered by stomach tube after preliminary fasting. The minimum dose was 0·1 c.c. per kg. or 4·5 c.c. per 100 lb. body weight. It was 85·8% effective against *Hyostrongylus rubidus* and 96·4% effective against *Ascarops strongylina*. Of 30 pigs, 27 showed symptoms of a transitory gastritis, 3 reacted by vomiting and dizziness and one was prostrate. F.A.C.

(684f) Steinbach is now of the opinion that the favourable results of arsenic and areca nut on Dirofilaria in dogs, reported by him in a preliminary report [see Helm. Abs., Vol. II, No. 472c], is due to the large doses of arsenic stimulating metabolism of the host and not to any anthelmintic action. J.W.G.L.

(684g) Mills gives an account of an outbreak of disease occurring in sheep and cattle on three ranches in California where animals were pastured on ladino clover. The symptoms were chiefly weakness, emaciation and diarrhoea associated with heavy nematode infection and on two ranches with bony changes although sufficient minerals were received by all the animals. Treatment with anthelmintics met with varying degrees of success. The author considers that the management of ladino clover consisting of irrigation every 7 to 10 days during dry seasons gives ideal environment for the building up of high infestations and that the bone lesions were secondary to the helminth infection. J.W.G.L.

(684i) Horning describes the use of hexylresorcinol as a successful anthelmintic against whipworms in dogs. He quotes Caldwell (1929) as

having used very effectively the latex of *Ficus laurifolia* shipped in dark green bottles from S. America. It was kept in a cold room or refrigerator for nearly a year without losing its anthelmintic value. J.W.G.L.

(684j) Dibbell records Dirofilaria in 10 to 18% of dogs in Baltimore and summarizes its life history, diagnosis, treatment, etc. J.W.G.L.

(684k) Ehrlich summarizes previous work on tetrachlorethylene and gives the following dosages :—dogs or foxes weighing 8 to 10 pounds, give 1 c.c. ; 10 to 20 pounds, give 2 c.c. ; 20 to 30 pounds, give 3 c.c., or add 1 c.c. for each 10 pounds above 20. For puppies weighing 2 pounds, give 0·3 c.c. ; 2 to 4 pounds, give 0·4 c.c. ; 4 to 6 pounds, give 0·6 c.c., and for puppies weighing 6 to 8 pounds, give 0·8 c.c. R.T.L.

(684l) Hinkle describes *Cysticercus pisiformis* of unusual size and shape from the abdominal cavity of a rabbit. Instead of the normal rather broad and pea-shaped appearance the cysts were long and narrow and measured from 16 to 28 mm. in length by 3 to 5 mm. in width as compared with normal cysts which are 5 to 9 mm. by 3 to 7 mm. J.W.G.L.

685—Vida Nueva.

a. CALVÓ FONSECA, R., KOURÍ, P. & BASNUEVO, J. G.—" Porcentaje y distribución geográfica del parasitismo intestinal en Cuba. Provincia de Pinar del Río. Pueblo : Artemisa." XXXVI (4), 313-318. [1935.]
b. CALVÓ FONSECA, R., KOURÍ, P. & BASNUEVO, J. G.—" Porcentaje y distribución geográfica del parasitismo intestinal en Cuba. Trabajo resumen de la ciudad de La Habana." XXXVI (6), 629-635. [1935.]

686—Vlaamsch Diergeneeskundig Tijdschrift.

a. WAELE, A. DE.—" Analytische studie van den stimuleerenden invloed der gal op het evaginatiepraes bij de cestodenvinnen." IV, p. 6. [1935.]

687—West African Medical Journal.

a. WILSON, C.—" The treatment of elephantiasis of the limbs." VIII (4), p. 12. [1935.]
b. LOVETT-CAMPBELL, A. C.—" Helminthiasis involving the appendix." VIII (4), p. 15. [1935.]

(687a) Injections of Fibrolysin, made every three days into the affected part, have markedly reduced redundant skin and greatly improved the lymph circulation in mild cases of elephantiasis. R.T.L.

(687b) Two cases are reported with symptoms suggesting involvement of the appendix. In one the appendix showed subacute inflammation and cellular infiltrations associated with *Schistosoma haematobium* eggs in the submuccosa and in the other a number of adult Oxyuris were found in the lumen. R.T.L.

688—Wiadomości Weterynaryjne.

a. SKŁADNIK, J.—" Trichoneminae u koni w polsce." (Trichonèmes chez le cheval en Pologne.) XIV (177), 137-182. [In Polish : French summary pp. 182-183.] [1935.]
b. NAGÓRSKI, F.—" Dwa przypadki pasorzytniczego zapalenia otrzewny u psów." (Deux cas de peritonite parasitaire chez les chiens.) XIV (180), 342-348. [In Polish : French summary p. 348.] [1935.]

c. ŁUKASIAK, J.—" Robaki pasorzytnicze i ich lokalizacja u psów w Warszawie." (Les vers parasitaires et leur localisation dans l'organisme des chiens de Varsovie.) XIV (183), 477-486. [In Polish : French summary pp. 486-487.] [1935.]

d. ŁUKASIAK, J.—" *Eucoleus aerophilus* (Creplin 1839) i *Crenosoma vulpis* (Dujardin 1845), nicienie narządów oddechowych, psa i lisa." (*Eucoleus aerophilus* (Creplin 1839) et *Crenosoma vulpis* (Dujardin 1845), nematodes des organes respiratoires des chiens et des renards.) XIV (184), 533-540. [In Polish : French summary p. 540.] [1935.]

(688a) Składnik has encountered 24 species of Trichoneminae in 24 horses autopsied in Poland. Each species is described and figured and, as a result of clearing specimens with lactic acid, tooth-like structures have been found in the oesophageal funnel of several species. Reasons are advanced for regarding *Trichonema barbatum*, *T. bidentatum* and *T. sagittatum* as synonyms of *T. calicatum*, *T. asymmetricum* and *T. coronatum* respectively. Up to 21 species were found in a single horse. B.G.P.

(688c) Łukasiak records the results of a thorough helminthological examination, covering all organs, of 121 stray dogs in Warsaw. Brief descriptions of the worms are given, and their individual incidences as determined by Ruszkowski (1925), Penkacki (1931) and himself are set out in a table. Another table compares the dog helminths found in Russia with those found in Poland. The total incidence of helminths in Warsaw dogs was 77%, comprised of two trematode species, seven cestodes and seven nematodes. B.G.P.

689—Wiener Tierärztliche Monatsschrift.

a. VAJDA, T.—" Vergiftung von Schweinen durch Chenopodiumöl und dessen unzuverlässige wurmtreibende Wirkung." XXII (5), 142-145. [1935.]

(689a) From a long experience with numerous samples of chenopodium oil in pigs Vajda finds that individual samples vary considerably in ascaricidal effect, some having no such effect, and that the drug is frequently toxic in its action, sometimes lethal. The intoxication symptoms indicate that there is a direct effect on the central nervous system. B.G.P.

690—Wissenschaftliche Berichte der Moskauer Staats-Universität.

a. LAUMAN, E. M.—" The postembryonal development of the representatives of the fam. Heterocheilidae and their life cycle." Heft 4, 129-134. [In Russian : English summary p. 134.] [1935.]

(690a) Lauman shows that in the post-embryonal development of various genera of Heterocheilidae the oesophagus passes through an " Anisakis " stage preceding further differentiation. The encystment in fishes of some heterocheilid larvae, which are adult in piscivorous birds, shows the evolution of an indirect life-cycle not yet completely obligatory. B.G.P.

691—Zeitschrift für Augenheilkunde.

a. LEWITSKY, M.—" Über den Cysticercus intraocularis." LXXXVI (5/6), 300-322. [1935.]

692—Zeitschrift für Brieftaubenkunde.

a. WETZEL, R.—"Saugwürmer aus der Familie der Echinostomiden als Darmparasiten in Tauben." L (43), 1025-1026. [1935.]

(692a) Wetzel records disease in carrier pigeons near Hamburg due to the presence of *Echinoparyphium paraulum*, *E. recurvatum* and *Hypoderaeum conoideum*. These worms are usually found as adults in ducks and other aquatic poultry, the intermediate host being species of *Limnaea* and *Planorbis*. Infected birds are emaciated and suffer from diarrhoea. The wall of the duodenum is inflamed and haemorrhagic. Heavy infections prove fatal.

P.A.C.

693—Zeitschrift für Urologie.

a. KÂMIL, F.—"Einige interessante Fälle aus dem Gebiete der Urologie." XXIX (8), 554-561. [1935.]

(693a) [Four cases of echinococcus cysts in the kidney.]

694—Zeitschrift für Vergleichende Physiologie.

a. HARNISCH, O.—"Daten zur Beurteilung des Sauerstoffverbrauchs von *Ascaris lumbricoides* (nach Messungen an isolierten Organen)." XXII (1), 50-66. [1935.]

(694a) Harnisch has measured the atmospheric-oxygen consumption of isolated organs of *Ascaris lumbricoides*. The oxygen consumptions of the body wall, uterus and ovary were about equal, but that of the intestine was considerably larger. The fluid of the body cavity in many cases consumed a small amount of oxygen. In explanation of these results the author suggests that the oxidisable substratum is a product of anaerobic metabolism, and that this is conveyed from the tissues by the body fluid to the intestine, where it is concentrated for excretion. Further experiments which were carried out gave results in support of this view. R.H.H.

695—Zentralblatt für Allgemeine Pathologie und Pathologische Anatomie.

a. FISCHER, W.—"Gallensteinbildung um Clonorchiseier." LXIII (5), 164-167. [1935.]

696—Zoogeographica.

a. BERG, L. S.—"Über die vermeintlichen marinen Elemente in der Fauna und Flora des Baikalsees." II (4), 455-483. [1935.]

(696a) Berg discusses the question of the supposed marine elements in the fauna and flora of Lake Baikal. On p. 475 brief reference is made to nematodes and to their relevance to the hypothesis that the lake has marine elements. T.G.

697—Zvěrolékařské Rozpravy.

a. JANDA, J.—"Histologický obraz strongylosy plic u vepře." IX (5), 56-60. [1935.]

(697a) [Histology of lungworm disease in pig.]

NON-PERIODICAL LITERATURE.

698—BALACHOWSKY, A. & MESNIL, L.—" Les insectes nuisibles aux plantes cultivées." Paris, 2 vols., 1921 pp. [1935.]

This textbook of agricultural entomology by Balachowsky & Mesnil deals principally with the habits of, and control measures against, the insect pests of cultivated plants of France and the Mediterranean region. In the first volume is a short section which deals, *inter alia*, with the nematodes attacking cereals and graminaceous plants and includes species of *Anguillulina* and *Heterodera*. In the second volume further reference is made to various species of these two genera, the parasites being dealt with under the host plants they attack. [Much of the information concerning the worms appears to be based on Goodey's " Plant Parasitic Nematodes."] J.N.O.

699—BARGER, E. H. & CARD, L. E.—" Diseases and parasites of poultry." London, 354 pp. [1935.]

Barger & Card deal with avian diseases of poultry, including game birds, addressing themselves not only to the veterinarian and laboratory man but also to the poultry farmer. There is a useful chapter on diagnostic methods, including post-mortem examination, following those on general upkeep and anatomy. Poisons and nutritional diseases, conditions caused by virus, bacterial and protozoan organisms and external parasites are considered and a chapter is given over to helminth parasites. In this each worm is taken separately ; its life history, pathology, symptoms, prevention and treatment are considered fully. Numerous original references are given. Illustrations are generally photographs. P.A.C.

700—BECKER S.—" Über verschiedenartige Krankheitsbilder bei Echinokokkus-infektion der Bauchhöhle unter Berücksichtigung ihrer Diagnose und Therapie." Halle-Wittenberg, Dissertation, 31 pp.

701—BOCK, F.—" Acanthocephala, Kratzer." In Schulze, P., Biologie der Tiere Deutschlands, Berlin, Lfg 38, Teil 9, 1-34. [1935.]

Briefly monographing the Acanthocephala, Bock restricts the systematics to a table of principal genera, with hosts, his text being concerned with general morphology and life-history. There are 19 figures and 39 references. B.G.P.

702—BODENHEIMER, F. S.—" Animal life in Palestine. An introduction to the problems of animal ecology and zoogeography." Jerusalem, [viii] + 506 pp. [1935.]

703—BUHR, K.—" Ueber Verbreitung und Stärke des Befalls von Hasen aus freier Wildbahn mit Parasiten unter Berücksichtigung geologisch-klimatischer Verhältnisse." Berlin, Dissertation, 34 pp. [1935.]

Buhr reports on the parasites of 100 wild hares from different parts of Germany and Hungary, and discusses the influence of soil and climate on the spread of the parasites ; thus, lungworms are prevalent in Thuringia and the Priegnitz where the soil is heavy and moisture is abundant. B.G.P.

704—CARR, J. W.—" The invertebrate fauna of Nottinghamshire. Supplement." Nottingham, viii + 287 pp. [1935.]

Roebuck has contributed brief records of the occurrence of the following nematodes to Carr's book: *Mermis albicans*, *Anguillulina dipsaci*, *Heterodera schachtii*, *H. marioni*, *Aphelenchoides fragariae*, *A. ritzema-bosi* and *A. olesistus*.

T.G.

705—CHOURAQUI, R.—" Les procédés de destruction des kystes hydatiques dans un but prophylactique." Algiers, Thesis, 90 pp. [1935.]

706—CORNILS, W.—" Systematische Untersuchungen über Strongylideneier und Strongyliden im Kot und Darminhalt des Pferdes." Berlin, Dissertation, 43 pp. [1935.]

From his investigation on strongyle eggs and strongyles in the faeces and intestine of horses Cornils found that there was considerable day-to-day variation of faecal egg counts and also in morning, mid-day and evening samples, there being more uniform results from mid-day faeces. More eggs were found on the surface of the faecal globule than in the substance. Egg measurements were similar to those given in the literature except for *Trichonema* which were smaller. Differential diagnosis of eggs by size was found to be impossible. The ratio of strongyle eggs to adults present varied greatly and gave no guide as to the degree of infestation present.

J.W.G.L.

707—DE RIVAS, D. & DE RIVAS, C. T.—" Clinical parasitology and tropical medicine." London, 367 pp. [1935.]

708—GAY, F. P. *et al.*—" Agents of disease and host resistance, including the principles of immunology, bacteriology, mycology, protozoology, parasitology, and virus diseases." London, xiii + 1581 pp. [1935.]

709—GILLOT, V.—" Oxyurose." In: Encyclopédie Médico-Chirurgicale, Paris. [Reprint 11 pp.] [1935.]

710—GILLOT, V. & SENEVET, G.—" Trichocéphalose." In: Encyclopédie Médico-Chirurgicale, Paris. [Reprint 5 pp.] [1935.]

711—KHALIL, M.—" Chemotherapie der Schistosomiasis." In: Wissenschaftliche Woche zu Frankfurt a.M., Vol. III, pp. 231-237. [1935.]

[See also Helm. Abs., Vol. IV, No. 126f.]

712—MENON, T. B.—" Maharaja of Travancore Curzon Lectures (University of Madras) (1934-1935). Problems in filariasis." Madras, [vi] + 67 pp. [1935.]

713—SCHUURMANS STEKHOVEN, jr., J. H.—" Nematoda errantia." In: Grimpe & Wagler, " Die Tierwelt der Nord- und Ostsee." Leipzig, Lieferung 28, Teil Vb, 173 pp. [1935.]

714—SCHUURMANS STEKHOVEN, jr., J. H.—" Nematoda parasitica." In: Grimpe & Wagler, " Die Tierwelt der Nord- und Ostsee." Leipzig, Lieferung 28, Teil Vc, 47 pp. [1935.]

(713 & 714) In this further instalment of Grimpe and Wagler's book, Schuurmans Stekhoven deals systematically with free-living nematodes (Nematoda errantia) and with parasitic forms (Nematoda parasitica). For the former a key of orders is given followed by one of families and genera.

Short accounts are given of the species within each genus together with measurements. There are a large number of excellent line drawings and about 13 pages of tables showing geographical distribution of species. This part closes with a discussion on bio-geography. The section on parasitic nematodes follows practically the same plan as that on the free-living forms ; the various species being considered according to order, family and genus. This part ends with 6 pages of host lists and 6 of bibliography. T.G.

715—SENEVET, G.—" Cysticercose." In : Encyclopédie Médico-Chirurgicale, Paris. [Reprint 3 pp.] [1935.]

716—SENEVET, G.—" Taeniasis et bothriocéphalose." In : Encyclopédie Médico-Chirurgicale, Paris. [Reprint 4 pp.] [1935.]

717—SENEVET, G.—" Coenurose." In : Encyclopédie Médico-Chirurgicale, Paris. [Reprint 1 p.] [1935.]

718—SENEVET, G. & LIÈVRE, H.—" Les distomatoses." In : Encyclopédie Médico-Chirurgicale, Paris. [Reprint 6 pp.] [1935.]

719—SIMMONS, J. E. & GENTZKOW, C. J.—" Laboratory methods of the United States army." Philadelphia, 4th Edition, xix + 1091 pp. [For Helminthology see pp. 891-906.] [1935.]

720—SMIRNOV, G. G.—" Nutrition of the Ascaris larvae in the process of migration." In : " Parasites, transmetteurs, animaux venimeux." Recueil des Travaux dédié au 25me Anniversaire Scientifique du Professeur Eugène Pavlovsky, 1909-1934, pp. 298-306. Moscow. [In Russian : English summary p. 306.] [1935.]

Smirnov has examined sections of liver and lung of guinea-pigs artificially infected with *Ascaris lumbricoides* and concludes that for the first 24 to 48 hours the larvae feed on blood plasma. Later they ingest red blood cells, but possibly do not digest them. While the adult ascaris is probably not normally a blood feeder, it will ingest blood resulting from pathological conditions in the intestine. Some 30 references on this point are cited. B.G.P.

721—SPREHN, C.—" Helminthen aus Kleinsäugern und Amphibien vom Schneeberg." In : Pax, F., " Beiträge zur Biologie des Glatzer Schneeberges," Breslau, Heft 1, pp. 82-86. [1935.]

Sprehn's helminthic material includes Szidat's (1928) *Distomum exasperatum* Rud. which Sprehn regards as a distinct species, *Paraplagiorchis szidati* n. sp. It was found in *Crocidura mimula*. *Paranematospira muris* n.g., n. sp., from *Apodemus* spp., is described and differentiated from *Heligmosomoides* and *Nematospira*. Porrocaecum larvae in *Sorex araneus*, *Trichuris muris* and *Syphacia obvelata* in *Apodemus flavicollis*, and Aplectana fragments in *Salamandra maculosa* complete the list. B.G.P.

722—VIQUEZ, C.—" Animales venenosos de Costa Rica : Parásitos intestinales de nuestros animales." San José, 313 pp. [1935.]

Some notes are given of the endoparasites of poisonous animals, particularly reptiles, in Costa Rica. R.T.L.

723—VOVAN-CAN.—" Recherches epidémiologiques sur l'helminthiase dans la population infantile de la Région Provençale." Marseille, Thesis, 48 pp. [1935.]

724—WARD, H. B.—" The longevity of *Diphyllobothrium latum*." In : " Parasites, transmetteurs, animaux venimeux." Recueil des Travaux dédié au 25me Anniversaire Scientifique du Professeur Eugène Pavlovsky, 1909-1934, pp. 288-293. Moscow. [In English : Russian summary p. 294.] [1935.]

Ward suggests that present-day conceptions regarding the longevity of this parasite are erroneous and that multiple successive infections are frequently attributed to a single long-lived specimen and gives a detailed review and analysis of the evidence hitherto published both in general works and special monographs and cites as specially important the history of the occurrence of this species on the North American continent. He points out that the age of the parasite is regularly based on the statement that the host had not been in an infected region for the period indicated. To this statement the objections are put forward that the distribution of the parasite and the natural occurrence of plerocercoid-carrying fish are far more extensive than was formerly suspected and, further, that infected fish are distributed commercially as food to regions far outside their natural area of distribution. From certain records it would seem that there is a " period of inactivity " during the adult life of the parasite and that its occurrence throws doubt upon the supposed longevity of the parasite. R.T.L.

725—WENIGER, H.—" Versuche zur Verbesserung der Methoden zum morphologischen Studium bescheideter Larvenstadien der Pferdestrongyliden." Berlin, Inaugural-Dissertation, 42 pp. [1935.]

Weniger describes his methods for a morphological study of the sheathed larvae of horse strongyles. He obtains the larvae by storing fresh faeces, loosely packed and slightly moistened, in glass jars in the dark at 20 to 21 C. Differential diagnosis is greatly assisted by staining larvae with acid carmine or acid fuchsin. Treatment for $\frac{1}{2}$ to $1\frac{1}{2}$ hours with Diaphanol is useful in giving stains better access to the worm tissues. B.G.P.

726—WINDHAUSEN, R.—" Untersuchungen über die Lebensfähigkeit und Invasionsfähigkeit der Rinderfinne nach dem Gefrieren bei einer konstanten Temperatur von −3°C." Giessen, Dissertation, 39 pp. [1935.]

Windhausen's experiments show that it is not sufficient merely to attain a temperature of −3°C. in order to render *Cysticercus bovis* uninfective : that temperature must be maintained for at least one hour. Cysticerci show viability (bile test) after exposures up to 24 hours, but by the Iwanizky test they are no longer infective after one hour's exposure. B.G.P.

727—WOLTER, E.—" Beitrag zur Biologie des Gänsemagenwurmes *Amidostomum anseris* (Zeder, 1800)." Berlin, Inaugural-Dissertation, 35 pp. [1935.]

Wolter discusses the incidence and epidemiology of *Amidostomum anseris* among geese in Germany. He describes the species and has made observations on the conditions necessary for the development of the egg and viability of the larvae. He has experimental evidence that the life history is direct, the pre-patent period being about 25 days. P.A.C.

INDEXES.

	Page
Index of Authors	222
Index of Periodicals	237
Index of Subjects	244
Corrigenda	276

NOTE.

In all indexes the reference is to the serial numbers and not to the pages. In the indexes of Authors and Subjects numbers in **bold** type indicate abstracts and numbers in Roman type refer to title-only entries.

In the Index of Authors, joint authors are separately listed. Thus, " Jones, A. & Brown, B." would appear also as " Brown, B. with Jones, A."

In the Index of Subjects, alphabetization is under the first word (e.g., " *Acer* sp." before " *Acerina* sp."). Under the generic name of a helminth the following order is observed : Papers on the genus as such ; papers on undefined species ; papers on new and defined species, e.g.,

Capillaria
— spp.
— *aerophila*
— *amarali* n. sp.

In cross-entries under names of hosts, the specific names of new species of helminths are omitted. *Anthelmintics* are listed under that word and also under name of parasite and/or host.

(The reference is to the serial numbers : numbers in **bold** type indicate abstracts.)

Abe, S., **174d.**
Aboucaya, A. with Zwirn, D. & Joyeux, C., 142a.
Ackert, J. E., **457a.**
Ackert, J. E. & Eisenbrandt, L. L., **133g.**
Ackert, J. E., Eisenbrandt, L. L., Wilmoth, J. H., Glading, B. & Pratt, I., **120a.**
Ackert, J. E. & Graham, G. L., 288a.
Ackert, J. E., Porter, D. A. & Beach, T. D., **133h.**
Ács, L. with Lőrincz, F., Czukelter-Szecsődy, J., Makara, G., Stiller, J. & Szabolcs, Z., **327.**
Adam, W. with Schuurmans Stekhoven, jr., J. H. & Punt, A., **320a.**
Adams, A. R. D., 69b, 92b, 341a.
Africa, C. M. & Garcia, E. Y., 156a, **284a, 284b.**
Africa, C. M. with Garcia, E. Y., **284c.**
Africa, C. M., Garcia, E. Y. & Layco, J., **256a.**
Africa, C. M., Garcia, E. Y. & Leon, W. de, **134a.**
Africa, C. M., Leon, W. de & Garcia, E. Y., **391a.**
Aggéry, B., **22c.**
d'Agostino, M., 345a.
Ahern, D. M. with Dogra, J. R., 241a.
d'Alessandria, E., 548a.
Alexander, L. L. & Dansker, A. N., **673g.**
Alexander, L. L. with Dansker, V. N. & Wite, L. E., **673b.**
Alicata, J. E., 133j, **133n, 390n, 667a.**
Alicata, J. E. with Jones, M. F., **139b.**
Alicata, J. E. with Schwartz, B., **41c.**
Allen, F. M. B., 289a.
Allen, J. A., 227a.
Allgén, C., **528a, 544a, 544b, 577a, 577b.**
Allison, L. N. with Holl, F. J., **178h,** 133f.
Almarza, N., **74a.**
Almeida, J. Lins de, **22a, 145a, 633b.**
Almeida, J. Lins de with Freitas, J. F. Teixeira de, **268a,** 633c.
Almeida, J. Lins de with Pinto, C., **527a.**
Altenkamp, T., 44a.
Alvaré, L. with Kourí, P., Basnuevo, J. G. & Lescano, O., 641k.
Alves Meira, J. with Pessôa, S. B., 195a.
American Society of Parasitologists, **390m.**
Amicis, A. de, 549b.
Anastasía, H. C., 438a.
Anderson, H. H. with Pereira, P. C. R., **668a.**
Anderson, M. G., 456a, **599a.**
Anderson, P. J., Armstrong, G. M., Beach, W. S., Clayton, E. E., Gaines, J. G., Gratz, L. O., Henderson, R. G., Johnson, J., Miller, P. R. & Poole, R. F., **425c.**
Anderson, P. J., Beach, W. S., Clayton, E. E., Gaines, J. G., Henderson, R. J., Johnson, J. & Miller, P. R., **285a.**
Andrews, J. S., **160o,** 160p.
Andrews, M. N., **20a, 33f.**
Anido, H. with Kourí, P. & Silveira, R., 502a.
Annamalai, D. R. with Menon, T. B., 40b.
Anon, **2a,** 16a, **38a,** 49a, 49b, 81b, **93b, 93c, 93d,** 158a, **190,** 232b, 245a, **309a,** 354b, 425a.
Appelmans, M., **643a.**
Arar, A., 216a.
Ardao, H. A., 474b.
Ardao, H. A. with Chifflet, A., 474a.
Arenas, N., 63a.
Arenas, R. with Kourí, P. & Basnuevo, J. G., 495a.
Armand-Delille, P., Lestocquois, C. & Boyer, J., 524b.
Armstrong, G. M. with Anderson, P. J., Beach, W. S., Clayton, E. E., Gaines, J. G., Gratz, L. O., Henderson, R. G., Johnson, J., Miller, P. R. & Poole, R. F., **425c.**
Arnaud with Martin, **582a.**
Arndt, C. H., **424a.**
Ashkar, M. F. & Issa, I. I., 126e.
Astrakhanskiy, V. A., 420a.
Augsberger, G., 266a.
Augustine, D. L. & Drinker, C. K., **458a.**
Augustine, D. L. with Drinker, C. K. & Leigh, O. C., **180b.**
Augustine, D. L. with Spink, W. W., 121a, 274a.
Augustine, D. L. with Theiler, H., **465b.**
Augustine, D. L. with Theiler, H. & Spink, W. W., **155i.**
Austin, M. D. with Jary, S. G., **39a.**
Ayyar, S. with Rao, M. A. N., **26a.**
Azevedo, A. P. de, 145b.
Azim, A., **32d, 126b,** 187b, **390e.**
Azim, M. A. with Khalil, M., 126h.

Babic, I., **681a.**
Badaljan, A. I., **484c.**
Badanin, N. V., **485a, 485b.**

Baer, J. G., **59c.**
Baer, J. G. with Joyeux, C., **59b, 224b, 365a, 480a, 525b.**
Baggio, G., 374a.
Baker, C. E. with Stiles, C. W., 594a.
Balachowsky, A. & Mesnil, L., **698.**
Baldassari, M. T., **142b.**
Baltzly, R. with Lamson, P. D., Brown, H. W., Stoughton, R. W., Harwood, P. D. & Bass, A., **255b, 255d, 255e.**
Banerjea, J. C., 550a.
Barbieri, G., **153b.**
Barger, E. H. & Card, L. E., **699.**
Barlow, C. H., **193a.**
Barnett, L. E., **209a**, 275a, 596a.
Barss, H. P., **158f.**
Basaca, M. with Tubangui, M. A., Pasco, A. M. & Rosario, F. del, **608c.**
Basnuevo, J. G, with Calvó Fonseca, R. & Kourí, P., 502c, 502d, 535a, 535c, 639a, 639b, 641i, 641l, 685a, 685b.
Basnuevo, J. G. with Kouri, P., Alvaré, L. & Lescano, O., 641k.
Basnuevo, J. G. with Kourí, P. & Arenas, R., 495a.
Basnuevo, J. G. with Kourí, P. & Calvó Fonseca, R., 636a, 636b.
Basnuevo, J. G. with Kourí, P. & Drake, T., 641g.
Basnuevo, J. G. with Kourí, P. & Fermoselle Bacardí, J., **143a**, 496a.
Basnuevo, J. G. with Kourí, P. & Sutter, R., 641c.
Bass, A. with Lamson, P. D., Brown, H. W., Stoughton, R. W., Harwood, P. D. & Baltzly, R., **255b, 255d, 255e.**
Baudet, E. A. R. F., **176c.**
Baylis, H. A., **90a, 90b, 90c, 200a, 340a.**
Beach, T. D., **162g.**
Beach, T. D. with Ackert, J. E. & Porter, D. A., **133h.**
Beach, W. S. with Anderson, P. J., Armstrong, G. M., Clayton, E. E., Gaines, J. G., Gratz, L. O., Henderson, R. G., Johnson, J., Miller, P. R. & Poole, R. F., **425c.**
Beach, W. S. with Anderson, P. J., Clayton, E. E., Gaines, J. G., Henderson, R. J., Johnson, J. & Miller, P. R., **285a.**
Bebeschin, K. W. with Smorodinzew, I. A., **15a.**
Becker, S., 700.
Beckett, F., 70d.
Belikov, P. F. with Shlyakhman, A. L. & Yagudina, R. N., 397c.
Bellocq, G. P., 644a.
Benassi, E., 434a.
Bennett, H. J., **36i.**
Bennett, R. A., 222a.
Bennetts, H. W., **99c.**
Benoit, R., **653a.**
Berberian, D. A. with Turner, E. L. & Dennis, E. W., **126m, 133c.**
Bercovitz, N., **312zd.**
Berg, L. S., **696a.**
Bergerot, J., 12a.
Berghe, L. van den, 196b.
Berny, P. & Saint-Prix, M., 358c.
Berny, P. with Stévenel, L., **358a**, 358b.
Bertini, G., 5a.
Bertrand, C. with Montestruc, E., 523a.
Bève, F. de, 88a.
Bhalerao, G. D., **26d, 26e, 26f, 378c, 449a.**
Bischoff, H., 260a.
Blacklock, D. B. & Southwell, T., **469.**
Blancardi, C., 356b.
Blanco, R. P., Capurro, F. G. & Dévé, F., 355a.
Bleecker, W. L. & Smith, R. M., **610a.**
Blenkinsop, A., **35a.**
Blind, C., **454c.**
Blondeau, A. with Duboucher, H., 515b.
Blondeau, A, with Duboucher, H. & Tillier, R., 515c.
Boase, A. J., **25b.**
Bock, F., **701.**
Bodenheimer, F. S., 702.
Boer, E. de, **455a, 462c.**
Boldyr, E. D. with Petruschevsky, G. K., 87i.
Bonga, B., **272a.**
Bongert, J., 111a, 111b, 111c.
Bonne, C., **115a.**
Bonzanigo, A., 170a.
Borcéa, L. L., 481a, 481b.
Bornand, **447a.**
Bosch Millares, J., 635a.
Bosher, J. E. with Newton, W. & Hastings, R. J., **281a.**
Boyer, J. with Armand-Delille, P. & Lestocquois, C., 524b.
Bozicevich, J. & Wright, W. H., **684e.**
Bozicevich, J. with Wright, W. H., **152a.**
Breton, **522a.**
Broc, R. & Mami, A., 677b, 677d.
Brown, H. W. with Lamson, P. D., **255c.**
Brown, H. W. with Lamson, P. D. & Molloy, D. M., **3b.**
Brown, H. W. with Lamson, P. D., Stoughton, R. W., Harwood, P. D., Baltzly, R. & Bass, A., **255b, 255d, 255e.**
Brown, H. W. with Lamson, P. D. & Ward, C. B., **255a.**
Brown, J., **460a.**
Bruck, A. J., 206b.
Brumpt, E., **645a.**
Brun, R. G., 677a.

Brüning, H., 203a, 539a, 592a.
Bryant, J., **69c.**
Buck, Lamberton & Randriambeloma, **165a.**
Buckley, J. J. C., **127b.**
Bugge, G., **14b.**
Buhr, K., **703.**
Buhrer, E. M. with Steiner, G., **158b.**
Buis, J., 271a.
Bullier, P. with Urbain, A., 512a, 516a.
Burchell, E. B. with Cregar, J. S., **344a.**
Burggraaf, H., 67a, **176b, 235c, 311a.**
Bushnell, W. F., 248a.
Butcher, W. H., 403a.
Buxó Izaguirre, P., 334a.
Byrd, E. E., **178g.**

Caballero, E., **85b, 475a, 475b.**
Caballero, E. & Sokoloff, D., 178c.
Cabassu, J. with Joyeux, C., **18c.**
Callot, J., 338b.
Callot, J. with Dollfus, R. P. & Desportes, C., **4a, 4f.**
Calvó Fonseca, R., Kourí, P. & Basnuevo, J. G., 502c, 535a, 535c, 639a, 639b, 641i, 641l, 685a, 685b.
Calvó Fonseca, R. with Kourí, P. & Basnuevo, J. G., 636a, 636b.
Calvo Melendro, J., 296a, 586a.
Calzada, V., **497a**, 497b.
Cameron, T. W. M., 8a, 177b, **181a, 242c, 361a**, 362a, 629a.
Campbell, J. W., **386a.**
Cantin, A. Y. with Kirk, J. B., 100d.
Capurro, F. G. with Blanco, R. P. & Dévé, F., 355a.
Card, L. E. with Barger, E. H., **699.**
Cardenal, L., 329a.
Cares, R. with Gordon, M. B. & Kaufman, B., 254a.
Carpentier, G., **625a.**
Carr, J. W., **704.**
Carrère, P., **224a.**
Carrodus, A. L., 402a.
Carroll, J. & McMahon, E., **127c.**
Carvallo, T., 546a.
Castens, E., 95c.
Castro Lima, O. de, 210a.
Castro Rosa, C. de, 300a.
Cataliotti, F., 651a.
Cattaneo, F., 531a.
Cawston, F. G., 40c, 100b, 138a, **138b, 138c**, 173a, 372a, **394c**, 450a, **459a**, 508a, 607a.
Cena, M. R., **622a.**
Chajutin, D. & Schuchat, I., 404f.
Chandler, A. C., **68f, 82c, 82e, 84a, 133i, 163a.**
Chang, T. L. with Yen, C. H., 262a.
Chapman, L. J. with Putnam, D. F., **656a.**
Chatterji, R. C., **77b, 164b.**
Chaudhuri, H., **294a.**
Chen, H. T., **42b, 42c, 87f**, 236a, **578b.**
Chen, W. L. & Rose, G., **312d.**
Cheu, S. H. & Khaw, O. K., **162d.**
Chiari, O., 461b.
Chifflet, A. & Ardao, H. A., 474a.
Chin, T. G., 42d.
Chitwood, B. G., 55f, **55h, 133p, 160r.**
Chitwood, B. G. & Chitwood, M. B., **139a.**
Chitwood, M. B., **55g.**
Chouraqui, R., 705.
Christenson, R. O., **87g, 178e.**
Christiansen, M., **580b, 580c.**
Christie, J. R., **54a.**
Christie, J. R. & Crossman, L., **160t.**
Chu, H. J. & Lee, C. U., **162e.**
Chu, H. J. with Yao, Y. T., 312w.
Chu, P. J. with Tao, C. S., Yu, T. H. & Wang, C., 107c.
Chu, P. J. with Yu, T. H., Wang, C. & Tao, C. S., 312x.
Chung, H. L. & Lee, C. U., **107a.**
Chung, H. L. with Lee, C. U., **162f.**
Ciarrocchi, E., 618a.
Cichero, C. with Vallarino, D., 657c.
Claessen, G., 191a.
Clapham, P. A., **33a, 33b, 33c, 127h.**
Clark, E. & Graef, I., 83a.
Clarke, C. H. D., **106a.**
Clayton, E. E. with Anderson, P. J., Armstrong, G. M., Beach, W. S., Gaines, J. G., Gratz, L. O., Henderson, R. G., Johnson, J., Miller, P. R. & Poole, R. F., **425c.**
Clayton, E. E. with Anderson, P. J., Beach, W. S., Gaines, J. G., Henderson, R. J., Johnson, J. & Miller, P. R., **285a.**
Clements, R. G., 100e.
Cobb, N. A., **55a.**
Coicou, F., 619a.
Cole, H. A., **155g.**
Collins, J. L. with Hagan, H. R., **128a.**
Collins, W. W., **36b.**
Coninck, L. A. de, **60a.**
Connery, J. E. with Curran, J. A. & Goldwater, L. J., **36p.**
Connery, J. E. with Goldwater, L. J., Steinberg, I. & Most, H., 417a.
Contino, F., 483a.
Cooke, W. E., **429b.**
Corcos, A. with Pinard, M. & Debray, C., 17b.
Corenzwit, H. M., **385b.**
Cornils, W., **706.**
Cort, W. W. with Foster, A. O., **3d.**
Cortesini, M., 410a.
Costa, G. da & Hamet, R., **204a.**
Costantini, H. & Curtillet, E., 167a, 291a.
Cottier, W. with Reid, W. D., **418a.**
Cottrell, H. B. with Keller, A. E., Googe, J. T., Miller, jr., D. G. & Harvey, R. H., 384b.

Courtney, W. D., **158c.**
Coutelen, F., 18b, 231a, 231b, **373a.**
Coutelen, F. & Piedelièvre, R., 18a.
Cram, E. B., **55p.**
Cregar, J. S. & Burchell, E. B., **344a.**
Cross, S. X., **133t.**
Cross, S. X. with Landsberg, J. W., **36r.**
Crossman, L. with Christie, J. R., **160t.**
Culbertson, J. T. & Talbot, S. B., **448b.**
Cunniffe, E. R., 201a.
Curasson, G., **102a.**
Curran, J. A., Connery, J. E. & Goldwater, L. J., **36p.**
Currie, G. A., **149a.**
Curtillet, E. with Costantini, H., 167a, 291a.
Czukelter-Szecsődy, J. with Lőrincz, F., Ács, L., Makara, G., Stiller, J. & Szabolcs, Z., **327.**

Dalling, T., 184g.
Damon, A., 684a.
Dang, J. M. L., 379a.
Daniel, 223a.
Dansker, A. N. with Alexander, L. L., **673g.**
Dansker, V. N. with Philiptchenko, A. A., **673c.**
Dansker, V. N., Wite, L. E. & Alexander, L. L., **673b.**
Darget, R. & Lange, 233a.
Darriba, A. R., **588b.**
Datta, M. N. & Poddar, T. N., **624a.**
Datta, S. C. A., **28a.**
Davies, T. I., **295b.**
Davis, N. C., **36c.**
Day, L. H. with Tufts, W. P., **293a.**
Dayal, J., **430a.**
Debray, C. with Pinard, M. & Corcos, A., 17b.
Delaye, 303a.
De-Leidi, G., 531b.
Delgado, R. & Remuñan, R., 302a.
Demidowa, A. J., **342a.**
Denecke, K., **321b.**
Dennis, E. W. with Turner, E. L. & Berberian, D. A., **126m, 133c.**
De Rivas, D. & De Rivas, C. T., 707.
Derqui, M. M. with Romano, N. & Maggi, A., 290a.
Descazeaux, **444a.**
Deschamps, A., 638a.
Deschiens, R., 291c.
Deshusses, J. & Deshusses, L. A., **168a.**
Desportes, C. with Dollfus, R. P. & Callot, J., **4a, 4f.**
Detroy, 538a.
Dévé, F., **109a,** 109b.
Dévé, F. with Blanco, R. P. & Capurro, F. G., 355a.
Dew, H. R., 354a, 584a, 683a.
Diamantis, A., 395a, 572a.
Dibbell, E. B., **684j.**
Diem & Marriq, 104a.
Diena, G., 492a.
Dikmans, G., **41b,** 55k, 55m, **55n,** 55 o, **160j,** 160l, 160m, 178d.
Dikmans, G. & Lucker, J. T., **160k.**
Dikmans, G. & Wehr, E. E., **55 l.**
Dikmans, G. with Wehr, E. E., **189a.**
Dinkel, J. H. with Norris, M. L. & Green, D. F., **276a, 597a.**
Dixon, H. B. F. & Smithers, D. W., 38b, **135a.**
Djegterenko, O. J. with Palimpsestow, M. A., **211b.**
Dobrovolny, C. G. & Dobrovolny, M. P., **68d.**
Dogra, J. R. & Ahern, D. M., 241a.
Dolgopol, V. B. & Neustaedter, M., 205a.
Dollfus, R. P., **4c, 87a, 87d, 343a, 359a, 359b, 359c, 360a.**
Dollfus, R. P., Callot, J. & Desportes, C., **4a, 4f.**
Doran, F. J., 279a.
Dorier, A., **21a,** 525a.
Drain, B. D. with Whittle, W. O., 530a.
Drake, E. H., Hawkes, R. S. & Warren, M., **384a.**
Drake, T. with Kourí, P. & Basnuevo, J. G., 641g.
Drechsler, C., **148a.**
Drinker, C. K. with Augustine, D. L., **458a.**
Drinker, C. K., Augustine, D. L. & Leigh, O. C., **180b.**
Dubois, G., **59a, 647b,** 647c.
Duboucher, H. & Blondeau, A., 515b.
Duboucher, H., Blondeau, A. & Tillier, R., 515c.
Dufourt, A. & Roman, E., **579a.**

Editorial, 138d.
Edney, J. M. with Nolf, L. O., **133y.**
Edson, H. A., Miller, P. R. & Wood, J. I., **609a.**
Edwards, E. E., **127g.**
Egidi, E., 605c.
Eguchi, S. & Kitayama, H., 669b.
Ehrlich, D., **684k.**
Eisenbrandt, L. L. with Ackert, J. E., **133g.**
Eisenbrandt, L. L. with Ackert, J. E., Wilmoth, J. H., Glading, B. & Pratt, I., **120a.**
Ejsmont, L., **602a.**
Ekbaum, E., **75c, 133s.**
Elliott, C. C., 64a.
El-Tobgy, A. F. & Wilson, R. P., 517a.
Emara, 32a.
Enigk, K., **490b.**
Epure, E. X., **510a.**
Erhardt, A., **464b.**
Errington, B. J. with Frost, J. N., **534a.**

Esménard, J. with Joyeux, C. & Sédan, J., 105a.
Etchechury, J., 98a.

Fairley, N. H., **429a.**
Fantus, B., 29a.
Farrell, C. C. with Glaser, R. W., **251a.**
Farzane, G. A. & Ibragimov, K., 575a.
Faulenborg, G., **399a.**
Faure, L., **4e.**
Faust, E. C., **69e, 207a, 390a, 394a.**
Faust, E. C. & Martinez, W. H., **390b.**
Faz Tabío, H., 225a.
Feijóo, A. with López Albo, W. & Marín, M., 333a.
Feng, L. C., **312b, 363a.**
Feng, L. C. & Yao, K. F., 107g.
Fermoselle Bacardí, J. with Kourí, P. & Basnuevo, J. G., **143a,** 496a.
Fernández, F. & Salcedo, R. D., 143c.
Fernando, S. E., **40a.**
Ferwerda, S. F. with Tenhaeff, C., **176a.**
Fethi, 249a.
Fèvre, M. & Petit, P., 524a.
Fierro Vignoli, M., 642b.
Filippini Rossi, E. & Pastor, E., 642c.
Finaly, R., 416b.
Fiorini, M., **618b.**
Fischer, W., 695a.
Foster, A. O., **82b, 133w.**
Foster, A. O. & Cort, W. W., **3d.**
Foveau de Courmelles, **646a.**
Foy, H. & Kondi, A., 390 o.
Frade, A. del with Kourí, P., **502b, 591e,** 641d.
Franchini, G., 13a, **471a.**
Frankenberg, G.v., **468b.**
Fraser, W. A. C., **421a.**
Freitas, J. F. Teixeira de & Almeida, J. Lins de, **268a,** 633c.
Freitas, J. F. Teixeira de & Lent, H., **166a, 268c, 476a, 640a, 640c, 640d.**
Freitas, J. F. Teixeira de with Lent, H., 237a, **409a, 409b, 640b.**
Friedmann, L., 404e.
Froilano de Mello, I., **615a.**
Frost, J. N. & Errington, B. J., **534a.**
Fuhrmann, O., **87j, 518a.**
Fujita, T., 506f.
Fukui, T. & Ogata, T., 655a.
Fukui, Y., 415a.
Funck, E., 72e, 72h.

Gabrieljan, M. J., **489a.**
Gaines, J. G. with Anderson, P. J., Armstrong, G. M., Beach, W. S., Clayton, E. E., Gratz, L. O., Henderson, R. G., Johnson, J., Miller, P. R. & Poole, R. F., **425c.**
Gaines, J. G. with Anderson, P. J., Beach, W. S., Clayton, E. E., Henderson, R. J., Johnson, J & Miller, P. R., **285a.**
Galdó, A. with López-Neyra, C. R., **53a.**
Gallien, L., **676a.**
Galli-Valerio, B., **447c, 465c, 653b.**
Garcia, E. Y. & Africa, C. M., **284c.**
Garcia, E. Y. with Africa, C. M., 156a, **284a, 284b.**
Garcia, E. Y. with Africa, C. M. & Layco, J., **256a.**
Garcia, E. Y. with Africa, C. M. & Leon, W. de, **134a, 391a.**
García Capurro, F. with Piaggio Blanco, R. A., 441a, 509a, 642a.
Garcia, G., 598a.
Gavrilov, W. with Rodhain, J., 339a.
Gay, F. P. *et al.*, 708.
Gayet, R. with Guilleminet, 579b.
Gear, H. S. & Pedersen H., **312r.**
Génevois with Poisson, H. & Lamberton, R., **18f.**
Genkin, I. I., 488b.
Gentzkow, C. J. with Simmons, J. S., 719.
Gil Chóliz, J., 364a.
Gilbert, W. W. with Neal, D. C., **113a.**
Gill, D. A., **151a,** 418b.
Gillot, V., 709.
Gillot, V. & Senevet, G., 710.
Gilyard, R. T., 684c.
Giordano, M., 97d.
Giovannola, A., **97c.**
Giraud, P., Salmon & Jouve, 524c.
Girges, R., 40d.
Girolami, M., **346d,** 505a.
Glading, B. with Ackert, J. E., Eisenbrandt, L. L., Wilmoth, J. H. & Pratt, I., **120a.**
Glaser, R. W. & Farrell, C. C., **251a.**
Godfrey, G. H., **54c, 158e, 424c, 425b.**
Godfrey, G. H. & Scott, C. E., **424b.**
Goffart, H., **77a, 146a, 189e, 536a.**
Gogate, B. S., **624c.**
Gögl, H., 461c.
Gohar, N., **4d.**
Goinard with Tillier & Le Genissel, 515a.
Goinard, P. & Vignardou, M., 558a.
Goldmann, 352a.
Goldschlager, A. I., 199a.
Goldwater, L. J. with Curran, J. A. & Connery, J. E., **36p.**
Goldwater, L. J., Steinberg, I., Most, H. & Connery, J. E., 417a.
Golob, M., 130a.
Goodey, T., **33e, 127d, 127l, 127m, 239a, 388d.**
Googe, J. T. with Keller, A. E., Cottrell, H. B., Miller, jr., D. G. & Harvey, R. H., 384b.
Gordon, H. McL., **31a, 99b, 117a.**

Gordon, H. McL. with Ross, I. C., **99a.**
Gordon, M. B., Cares, R. & Kaufman, B., 254a.
Gorrie, R. with Waite, C. H., **121c.**
Gotthardt, 454d.
Grado, G., 446a.
Graef, I. with Clark, E., 83a.
Graham, G. L., **36h, 36q.**
Graham, G. L. with Ackert, J. E., **288a.**
Grall, G., 86a.
Gratz, L. O. with Anderson, P. J., Armstrong, G. M., Beach, W. S., Clayton, E. E., Gaines, J. G., Henderson, R. G., Johnson, J., Miller, P. R. & Poole, R. F., **425c.**
Gravano, L., 657a.
Gray, J. & Thompson, H. G., **312ze.**
Green, D. F. with Morris, M. L. & Dinkel, J. H., **276a, 597a.**
Greenway, D., 290b, 500a.
Greenwood, D. N., 557a.
Grieder, H., **169a, 447b.**
Grinsted, P., 580a.
Gruber, G. B., 147a.
Grzimek, B., **175a.**
Guglielmini, T. & Molinari, E., 422a.
Guiart, J., **214a, 630a.**
Guilleminet & Gayet, R., 579b.
Gurwitsch, G. A., **581c.**
Gutiérrez, A. & Ruiz, V., 498a.
Gwynn, A. M. & Hamilton, A. G., **421c.**

Hagan, H. R. & Collins, J. L., **128a.**
Haji, C. S. G., **551a.**
Hall, M. C., **242a**, 316a, 621a.
Hamet, R. with Costa, G. da, **204a.**
Hamilton, A. G. with Gwynn, A. M., **421c.**
Handa, B. N., 682a.
Hanson, K. B. & McBlain, jr., W. G., **30c.**
Harada, I., **590a.**
Harant, 491a.
Harnisch, O., **694a.**
Harpøth, H., 313a.
Harvey, R. H. with Keller, A. E., Googe, J. T., Cottrell, H. B. & Miller, jr., D. G., 384b.
Harwood, P. D., 160d, **571a.**
Harwood, P. D. with Lamson, P. D., Brown, H. W., Stoughton, R. W., Baltzley, R. & Bass, A., **255b, 255d, 255e.**
Hasegawa, T., 154e, **154g.**
Hassan, A. & Salah, M., **126a.**
Hassan, A. with Salah, M., **11a.**
Hastings, R. J., **158d, 158g.**
Hastings, R. J. with Newton, W. & Bosher, J. E., **281a.**
Haughwout, F. G., **529a.**
Hautefeuille, J., **4b.**
Hawkes, R. S. with Drake, E. H. & Warren, M., **384a.**
Hays, I. M., **30a.**
Headlee, W. H., **130b.**
Hedrick, L. R., **390h, 456b.**
Heidegger, E., **490a.**
Heinze, K., **189b, 321a, 468a.**
Heitz-Boyer, **218a.**
Heller, M. R., **457b.**
Hellesnes, P., **419a.**
Henderson, R. G. with Anderson, P. J., Armstrong, G. M., Beach, W. S., Clayton, E. E., Gaines, J. G., Gratz, L. O., Johnson, J., Miller, P. R. & Poole, R. F., **425c.**
Henderson, R. J. with Anderson, P. J., Beach, W. S., Clayton, E. E., Gaines, J. G., Johnson, J. & Miller, P. R., **285a.**
Héran, J. with Jeanbrau, E. & Truc, E., 491b.
Hernández d'Empaire, J. R., 546c.
Hilmy, I. S., **32c.**
Hinkle, jr., T. C., **684i.**
Hinman, E. H., **84b, 394b.**
Hiyeda, K., **312y.**
Hjortlund, S., **307a.**
Hobmaier, M. & Hobmaier, A., **122a, 162h, 321c.**
Ho-Dac-Di & Huynh-Tien-Doi, 291d.
Hodson, W. E. H., **61b.**
Hoeppli, R., **80a.**
Hoeppli, R. J. C. with Hu, C. H., **162c.**
Hoffman, W. A., 55s.
Hofmann, E., **269a.**
Holl, F. J. & Allison, L. N., 133f, **178h.**
Honess, R. F., **679a.**
Hopkins, S. H., 133za.
Hopkins, S. H. & Wheaton, E., **133zd.**
d'Hooghe, M., 88b.
Horning, J. G., **684i.**
Horsfall, M. W., **160g.**
Hosemann, G., 467a.
Houdemer, E., **649a.**
Hsü, H. F., **187a, 321d**, 647a.
Hsu, S. C. with Yao, Y. T. & Ling, L. C., **312u**, 312v.
Hsü, Y. C., **578a, 606c.**
Hu, C. H. & Hoeppli, R. J. C., **162c.**
Hu, S. M. K., **42a, 107b, 283b, 283c, 606a, 606b.**
Hu, S. M. K. & Yen, C. H., **312a.**
Hu, S. P., 658a.
Hugonot, G. & Sohier, R., 356a.
Hulse, C. R. with O'Connor, F. W., **433a.**
Humphrey, H. B. & Wood, J. I., **286a.**
Hungerford, T. G., 81a.
Hunnicutt, T. N., 121b.
Hunninen, A. V., **360**, 133x, **193c.**
Hunter, G. W. III & Hunter, W. S., 390i.
Hunter, W. S. & Hunter, G. W. III, 133d.
Hurst, R. H. & Triffitt, M. J., **388a, 388b.**

Hurst, R. H. with Triffitt, M. J., **388c.**
Huynh-Tien-Doi with Ho-Dac-Di, 291d.

Iacapraro, G., 171a.
Iacovliesic, 632b.
Ibragimov, K. with Farzane, G. A., 575a.
Ibscher, K., 72g.
Ichioka, A. & Kato, T., **561b.**
Imhoff, J. D., 637a.
Impallomeni, R., 549a.
Imperatori, C. J., 671a.
Ingles, L. G., **68c.**
Inhelder, H. E., 170b.
Introzzi, A. S. with Ivanissevich, O., 353a, 501b.
Ishii, N., **119a, 382a, 383e, 553a.**
Ishii, N. & Matsuoka, F., **382b.**
Issa, I. I. with Ashkar, M. F., 126e.
Isshiki, O., **561a.**
Ivanissevich, O., 212a.
Ivanissevich, O. & Introzzi, A. S., 353a, 501b.
Iwanoff, X., **454a.**
Iyer, P. V. S. with Wright, R. E. & Pandit, C. G., **116a.**
Izumi, M., **396a.**

J. R. F. P., 100c.
Jacocks, W. P., Kendrick, J. F. & Sweet, W. C., 377a.
Janda, J., 697a.
Jary, S. G. & Austin, M. D., **39a.**
Jary, S. G. & Travers, S. J., **137a.**
Jeanbrau, E., Truc, E. & Héran, J., 491b.
Jeremy, R. & Jones, E. B., 263a.
Jesus, Z. de, **423a, 608a.**
Ji, Tschan Tsching with Otto, I. H., 11b.
Johnson, J. with Anderson, P. J., Armstrong, G. M., Beach, W. S., Clayton, E. E., Gaines, J. G., Gratz, L. O., Henderson, R. G., Miller, P. R. & Poole, R. F., **425c.**
Johnson, J. with Anderson, P. J., Beach, W. S., Clayton, E. E., Gaines, J. G., Henderson, R. J. & Miller, P. R., **285a.**
Johri, L. N., **421b.**
Jones, E. B. with Jeremy, R., 263a.
Jones, M. F., 160q.
Jones, M. F. & Alicata, J. E., **139b.**
Jones, T. L. & Kingscote, A. A., **193b.**
Jouve with Giraud, P. & Salmon, 524c.
Joyeux, C. & Baer, J. G., **59b, 224b, 365a, 480a, 525b.**
Joyeux, C. & Cabassu, J., **18c.**
Joyeux, C., Sédan, J. & Esménard, J., 105a.
Joyeux, C. with Zwirn, D. & Aboucaya, A., 142a.
Junack, M., **72f.**

Kagawa, S. & Kuyama, S., **154a.**
Kalantarian, H. W., **484b.**
Kalyus, V. A., 663a.
Kamalow, N., **581a.**
Kâmil, F., 693a.
Kamimura, T., 132b.
Kao, Z. M. with Ku, D. Y., 312j.
Karpinski, J. J., **674a.**
Kasprzak, Z., **622c.**
Kato, T. with Ichioka, A., **561b.**
Kaufman, B. with Gordon, M. B. & Cares, R., 254a.
Kawai, T., **453c.**
Kawana, H. with Komiya, Y. & Tao, S. C., 569b.
Kawana, K. with Komiya, Y. & Tao, S., **312o.**
Keller, A. E., **34a.**
Keller, A. E., Googe, J. T., Cottrell, H. B., Miller, jr., D. G. & Harvey, R. H., 384b.
Keller, A. E. with Leathers, W. S., 45a.
Keller, H., **72b, 186a, 186b.**
Kendrick, J. F. with Jacocks, W. P. & Sweet, W. C., 377a.
Kennedy, A. H. & Law, R. G., **19b.**
Kerr, K. B., **82d.**
Kerr, K. B. & Petkovich, O. L., **133ze.**
Kerr, T., **7a.**
Khalfen, S. S., 575b.
Khalil, M., 126c, **126f,** 126j, **711.**
Khalil, M. & Azim, M. A., 126h.
Khalil, M. & Salah, M., 126i.
Khan, M. H., **292c.**
Khaustov, J. M., **673d.**
Khaw, O. K., **162b, 312f.**
Khaw, O. K. with Cheu, S. H., **162d.**
King, M. K., 417b.
Kingscote, A. A. with Jones, T. L., **193b.**
Kirby-Smith, J. L., **451a.**
Kirjanova, E. S., **400a, 426a.**
Kirk, J. B. & Cantin, A. Y., 100d.
Kitayama, H. with Fguchi, S., 669b.
Knott, J., **180c.**
Knox, J. C. with Passey, R. D. & Leese, A., **37a.**
Ko, B. with To, S., **665a.**
Kobayashi, H., 506c, 506e.
Kobayashi, H. & Syôgaki, Y., 506a.
Kocjan, L., 573a.
Koegel, A., **414a.**
Kofoid, C. A. & Williams, O. L., **206a.**
Ko-Gyokukai, 65b.
Koh, T. M. with Rose, G., **312e.**
Kohn, F. G., **611a.**
Koidzumi, M., **312 1,** 506d.
Kolbe, F., **318a.**
Kolenko, A. B., 664a.
Komiya, Y., Kawana, H. & Tao, S. C., 569b.
Komiya, Y., Kawana, K. & Tao, S., **312o.**
Kondi, A. with Foy, H., 390 o.

Korkhaus, R., **66a.**
Koropov, V., **404b.**
Kotlán, A., **242d.**
Kourí, P., 347a, 641e.
Kourí, P., Basnuevo, J. G., Alvaré, L. & Lescano, O., 641k.
Kourí, P., Basnuevo, J. G. & Arenas, R., 495a.
Kourí, P., Basnuevo, J. G. & Calvó Fonseca, R., 636b.
Kourí, P., Basnuevo, J. G. & Drake, T., 641g.
Kourí, P., Basnuevo, J. G. & Fermoselle Bacardí, J., **143a**, 496a.
Kourí, P., Basnuevo, J. G. & Sutter, R., 641c.
Kourí, P., Calvó Fonseca, R. & Basnuevo, J. G., 502d, 636a.
Kourí, P. with Calvó Fonseca, R. & Basnuevo, J. G., 502c, 502d, 535a, 535c, 639a, 639b, 641i, 641l, 685a, 685b.
Kourí, P. & Frade, A. del, **502b, 591e,** 641d.
Kourí, P., Sellek Azzi, A. & Rivera, R., 535b.
Kourí, P., Silveira, R. & Anido, H., 502a.
Kourí, P. & Valverde, A., 588a, 641a.
Kraneveld, F. C., **272c, 595a.**
Kreis, H. A., **182a.**
Krijgsman, B. J., **150a.**
Krueger, **318b.**
Krüger, F., **616a.**
Krull, W. H., **52a, 55t, 160e,** 160f, **178b, 473a, 597b, 603a.**
Ku, D. Y., 312n.
Ku, D. Y. & Kao, Z. M., 312j.
Kubota, S., **312zb.**
Kulkarni, R. B., **294d.**
Kulkow, A. E. & Sternberg, A. M., **411a.**
Kuyama, S. with Kagawa, S., **154a.**

Lal, M. B., **615c, 615d.**
Lal, M. B. with Thapar, G. S., **294e.**
Lamberton with Buck & Randriambeloma, **165a.**
Lamberton, R. with Poisson, H. & Génevois, **18f.**
Lamson, P. D. & Brown, H. W., **255c.**
Lamson, P. D., Brown, H. W., Stoughton, R. W., Harwood, P. D., Baltzly, R. & Bass, A., **255b, 255d, 255e.**
Lamson, P. D., Brown, H. W. & Ward, C. B., **255a.**
Lamson, P. D., Molloy, D. M. & Brown, H. W., **3b.**
Landsberg, J. W. & Cross, S. X., **36r.**
Lane, C., 140b, 180a, **180e, 261a,** 458c.
Lange with Darget, R., 233a.
Lange, W. with Nagel, E., **408a.**
Langen, C. D. de **312za.**
Lapage, G., **127e, 127f, 131a, 155e, 239b, 627a.**
Lapierre, G., Major, W. & Martin, P., 678a.
Laplane, R. with Pagniez, P., Plichet, A. & Salles, P., 17a.
Laporta Bort, L. with Ximénez del Rey, M., 367a, 437b.
Larregla, S. with Suñer, E., 620a.
Larrousse, F., **338a.**
Lattes, E., 605a.
Lauman, E. M., **690a.**
Lavergne, J., **105c.**
Law, R. G. with Kennedy, A. H., **19b.**
Layco, J. with Africa, C. M. & Garcia, E. Y., **256a.**
Leathers, W. S. & Keller, A. E., 45a.
Lebour, M. V., 562a.
LeComte, R. M., 554a.
Ledentu, G., **336a.**
Lee, C. U. & Chu, H. J., **162e.**
Lee, C. U. & Chung, H. L., **162f.**
Lee, C. U. with Chung, H. L., **107a.**
Lee, W., 429c.
Leese, A. with Passey, R. D. & Knox, J. C., **37a.**
Le Genissel with Tillier & Goinard, 515a.
Lehucher & Rollin, 677c.
Leigh, O. C. with Drinker, C. K. & Augustine, D. L., **180b.**
Leiper, R. T., **432a, 432b.**
Lemaire, G. & Ribère, **22d, 22e.**
Lent, H. & Freitas, J. F. Teixeira de, 237a, **409a, 409b, 640b.**
Lent, H. with Freitas, J. F. Teixeira de, **166a, 268c, 476a, 640a, 640c, 640d.**
Lentze, F. A., **188c.**
Leo, T. L., 107f.
Leon, W. de with Africa, C. M. & Garcia, E. Y., **134a, 391a.**
le Roux, J. C. & Stofberg, J. F., **114a.**
Lesbouyries, M., **649b.**
Lescano, O. with Kourí, P., Basnuevo, J. G. & Alvaré, L., 641k.
Leslie, A., **513a.**
Lestocquois, C. with Armand-Delille, P. & Boyer, J., 524b.
Levine, J. & Marin, R. A., 34b.
Lewaschow, M., **581b.**
Lewcock, H. K., **58a.**
Lewis, F. J., **178a.**
Lewitsky, M., 691a.
Lewitus, V., **684b.**
Li, H. C., **36m.**
Li, L. Y., **141a.**
Li, T. Y. & Thompson, H. G., 312s.
Lian, C. & Odinet, J., 291b.
Lièvre, H. with Senevet, G., 718.
Lillingston, C., 238a.
Lindberg, K., 105b, **358e,** 442a.
Lindeman, S. J. L. & Lyburn, R. St. J., 135b.

Ling, L. C. with Yao, Y. T. & Hsu, S. C., **312u**, 312v.
Lins, M. & Wanderley, F., 301a.
Lipscomb, F. M., 392a.
Live, I. with Stubbs, E. L., **385c**.
Lockart-Mummery, P., 57a.
Lodenkämper, H. with Schäfer, W., **589a**.
Loewen, S. L., **133e**.
Lonjon, P. with Riche, V. & Mourgue-Molines, E., 412a.
López Albo, W., Feijóo, A. & Marín, M., 333a.
López-Neyra, C. R., **499a**, **503a**.
López-Neyra, C. R. & Galdó, A., **53a**.
Lőrincz, F., 545a.
Lőrincz, F., Ács, L., Czukelter-Szecsődy, J., Makara, G., Stiller, J. & Szabolcs, Z., **327**.
Loucks, H. H., **312i**.
Lovett-Campbell, A. C., **687b**.
Lucena, J. M., 407a.
Lucker, J. T., **55i**, **390g**.
Lucker, J. T. with Dikmans, G., **160k**.
Luhman, M., **133u**.
Lührs, E., **370a**.
Lukasiak, J., 688c, 688d.
Luna, C. de with Moiroud, P., 612a.
Lutrot, M., 18e.
Luttermoser, G. W., **390p**.
Lutz, A., **22b**, **268b**.
Lyburn, R. St. J. with Lindeman, S. J. L., 135b.

MacArthur, W. P., **354c**, 398b.
McBlain, jr., W. G. with Hanson, K. B., **30c**.
McCoy, O. R., **3c**, **157a**.
McCune, E. F., 30b.
McCunn, J., **184c**.
McEwen, A. D., **39b**, **247a**.
MacGinitie, G. E., 473b.
M'Gonigle, G. C. M., **264a**.
Maciel, H., 507a.
McIlwaine, J. E., 46a, 46b.
McIntosh, A., **36f**, **36g**, **68e**, 160h, **160i**.
McIntosh, A. & McIntosh, G. E., **55q**.
McIntosh, A. with Price, E. W., 55r.
McKinley, E. B., 194a.
McMahon, E. with Carroll, J., **127c**.
McMullen, D. B., **36e**, **133k**, **390f**.
McRae, A., **133l**, **133o**.
Macy, R. W., 160c, **390j**.
Maeozoko, T., 65a.
Maggi, A. with Romano, N. & Derqui, M. M., 290a.
Mainzer, F., 79a.
Major, W. with Lapierre, G. & Martin, P., 678a.
Makara, G. with Lőrincz, F., Ács, L., Czukelter-Szecsődy, J., Stiller, J. & Szabolcs, Z., **327**.
Malavasi, W., 605b.
Malevitch, J. J., **672c**.
Mallik, K. L. B., 118a.
Mami, A. with Broc, R., 677b, 677d.
Mandoul, H., 563a.
Manson-Bahr, P., 180d.
Manter, H. W., 133m, **155k**.
Maplestone, P. A., **118c**, **118d**, **624b**.
Maplestone, P. A. & Mukerji, A. K., 118b.
Maré, G. S. & Villiers, O. T. de, **136a**.
Marín, M. with López Albo, W. & Feijóo, A., 333a.
Marin, R. A. with Levine, J., 34b.
Markowski, S., **514a**, **514c**, **514d**, 533b, 533c, 533d.
Marriq & Diem, 104a.
Martillotti, F., 282b.
Martin & Arnaud, **582a**.
Martin, P. with Lapierre, G. & Major, W., 678a.
Martin, W., **680a**.
Martinez, W. H. with Faust, E. C., **390b**.
Martínez-Báez, M., **87c**.
Masi, G. de, **593a**.
Masilungan, V. A. with Tubangui, M. A., **608b**.
Maskar, U., **349a**.
Mata, R. de, 634a.
Mathias, P., **108a**.
Mathias, P. & Vignaud, R., **366a**.
Matoff, K., **175b**.
Matsuoka, F. with Ishii, N., **382b**.
Matsuura, T., 253a.
Mattausch, F., 110a.
May, J. M., 220b.
Mayeozoko, T., 174b.
Mayne, W. W., **217a**.
Mazzini, O. F., 504a.
Medulla, C., 208b.
Mehra, H. R., **292i**.
Melnikov, A., 662b.
Mendelsohn, W., **390l**.
Menon, T. B., 712.
Menon, T. B. & Annamalai, D. R., 40b.
Mercier & Montagné, 357a.
Mesnil, L. with Balachowsky, A., **698**.
Michaël, P. R., **273b**.
Michaïl, D., 337a.
Michailoff, W. W., **74b**.
Mickaniewski & Nguyên-van-Chuc, 220a.
Mikhelson, A. I., 397b.
Mikkonen, H., 229a.
Milchik, M. I., 662a.
Milks, H. J., **534b**.
Miller, jr., D. G. with Keller, A. E., Googe, J. T., Cottrell, H. B. & Harvey, R. H., 384b.
Miller, E. L., **133r**.
Miller, jr., H. M., **3a**, **3e**.
Miller, J. H., **285b**.

Miller, P. R. with Anderson, P. J., Armstrong, G. M., Beach, W. S., Clayton, E. E., Gaines, J. G., Gratz, L. O., Henderson, R. G., Johnson, J. & Poole, R. F., **425c.**
Miller, P. R. with Anderson, P. J., Beach, W. S., Clayton, E. E., Gaines, J. G., Henderson, R. J. & Johnson, J., **285a.**
Miller, P. R. with Edson, H. A. & Wood, J. I., **609a.**
Mills, R. H., **684g.**
Minamizaki, Y., **312k.**
Mironescu, D. M. with Popescu, F., **348a.**
Mirza, M. B., **292f.**
Mirza, M. B. & Narayan, S. S., **615e.**
Mishin, D. F., 397a.
Miyamoto, S. & Uchida, C., 174a.
Mohamed, A. S., 32b.
Mohler, J. R., **435a.**
Moiroud, P. & Luna, C. de, 612a.
Molina, R. R., **297a.**
Molinari, E. with Guglielmini, T., 422a.
Molloy, D. M. with Lamson, P. D. & Brown, H. W., **3b.**
Mönnig, H. O., **114b**, 232c, **540a**, **570a**, **600a.**
Mönnig, H. O. & Quin, J. I., **600b.**
Montagné with Mercier, 357a.
Montestruc, E. & Bertrand, C., 523a.
Moorthy, V. N., **27a.**
Morquio, L., 305a.
Morris, M. L., Dinkel, J. H. & Green, D. F., **276a**, **597a.**
Morrison, H., 274b.
Most, H. with Goldwater, L. J., Steinberg, I. & Connery, J. E., 417a.
Mourgue-Molines, E. with Riche, V. & Lonjon, P., 412a.
Moussaron, A., **648a.**
Mozumdar, S., 379b.
Mu, J. W., **162a.**
Mueller, J. F., **361**, **36n.**
Mufel, P., 404g.
Mukerji, A. K. with Maplestone, P. A., 118b.
Müller, F. R., **172a.**
Müller, F. R. with Wetzel, R., **369a.**
Mulligan, B. O. with Ogilvie, L., **61a.**
Mulligan, B. O. with Walton, C. L. & Ogilvie, L., **123a.**
Munerati, O., **552a.**
Muresan, E. with Pop, A. & Nana, A., 632a.
Musgrave, J. A., **403b.**
Musser, J. H., **91a.**

Nagahana, M., 246a.
Nagaty, H. F., **1261.**
Nagel, E. & Lange, W., **408a.**
Nagórski, F., 688b.
Nair, P. K., 297b.
Nakamoto, T. with Tsunoda, T. & Shirai, S., **669a.**
Nakata, K., **124a.**
Nana, A. with Pop, A. & Muresan, E., 632a.
Narayan, S. S. with Mirza, M. B., **615e.**
Narihara, N., **174c.**
Neal, D. C. & Gilbert, W. W., **113a.**
Neuber, E., **71a**, 202a.
Neustaedter, M. with Dolgopol, V. B., 205a.
Neveu-Lemaire, M., **87b.**
Newbigin, H. F. & Wilson, J. E., **179a.**
Newhall, A. G., **54b.**
Newton, W., Hastings, R. J. & Bosher, J. E., **281a.**
Nguyên-van-Chuc with Mickaniewski, 220a.
Nieva, D. E., 520a.
Niño, F. L., **501a**, 657b.
Nolf, L. O. & Edney, J. M., **133y.**

Ochoterena, I., **85a.**
O'Connor, F. W. & Hulse, C. R., **433a.**
Odinet, J. with Lian, C., 291b.
Ogata, T. with Fukui, T., 655a.
Ogilvie, L. & Mulligan, B. O., **61a.**
Ogilvie, L. with Walton, C. L. & Mulligan, B. O., **123a.**
Ohashi, K., **567b.**
Ohira, T., **312m.**
Okada, S., 506b.
Økland, F., **48a**, **325a.**
Oldham, J. N., **33d**, **127k.**
Oldt, F., 42e.
Oliveira Castro, G. M. de, **633a.**
Ono, S., **129a**, **561c.**
Orchard, O. B., **94a.**
Orihuela, J., 474c.
Orloff, I. W., **512b.**
Ortis, P. N., 250a.
Ortlepp, R. J., **232a**, **280a**. **280b.**
Osborn, H. A., **398a.**
Ostertag, R. v., 72c.
Otto, G. F., 332a.
Otto, I. H. & Ji, Tschan Tsching, 11b.
Otto, J. H., **312g.**
Outeiriño Nuñez, J., **296b**, **479a.**
Ozaki, Y., **568a**, **568b**, **614b.**

Paggi, B., 287a.
Pagniez, P., Plichet, A., Laplane, R. & Salles, P., 17a.
Palimpsestow, M. A. & Djegterenko, O. J., **211b.**
Palimpsestow, M. A. & Tschebotarew, R. S., **454b.**
Panayotatou, A. G., **576a.**
Pandazis, G., **470a.**
Pande, B. P., **292d**, 292h, 613a.
Pande, P. G., **378a**, **378b.**

Pandit, C. G. with Wright, R. E. & Iyer, P. V. S., **116a.**
Parnell, I. W., **181b, 393a.**
Parvis, F. with Scartozzi, C., 376a.
Pasco, A. M. with Tubangui, M. A., Basaca, M. & Rosario, F. del, **608c.**
Passey, R. D., Leese, A. & Knox, J. C., **37a.**
Pastor, E. with Filippini Rossi, E., 642c.
Paterno, A., 375a.
Patwardhan, S. S., **56a, 164a, 294c, 326a.**
Pavlov, P., 4g, **196a.**
Payad, E., 256b.
Peacock, A. H. & Voegtlin, W. L., 277a.
Pedersen, H. with Gear, H. S., **312r.**
Peña Chavarría, A. & Rotter, W., **342c.**
Penso, G., 346a, 427a.
Pereira, C., **494a, 494e, 631b.**
Pereira, C. with Vaz, Z., **68g.**
Pereira, P. C. R. & Anderson, H. H., **668a.**
Peréz Vigueras, I., 591a, **591b,** 591c, **591d, 641f,** 641h, **641j.**
Pessôa, S. B., **543a.**
Pessôa, S. B. & Alves Meira, J., 195a.
Pesta, O., **487a.**
Peters, B. G., **127j.**
Petit, P. with Fèvre, M., 524a.
Petkovich, O. L. with Kerr, K. B., **133ze.**
Petrow, A. M. with Skrjabin, K. I., **36j.**
Petruschevsky, G. K. & Boldyr, E. D., **87i.**
Pfaeltzer, J. W., **486a.**
Philip, P. W., 100a.
Philiptchenko, A. A. & Dansker, V. N., **673c.**
Piaggio Blanco, R. A. & García Capurro, F., 441a, 509a, 642a.
Piedelièvre, R. with Coutelen, F., 18a.
Piercy, S. E. with Stewart, W. L., **560a.**
Piéri, J., 547a.
Pillers, A. W. N., **70a.**
Pinard, M., Debray, C. & Corcos, A., 17b.
Pintner, T., **77c.**
Pinto, C., **527b,** 527c.
Pinto, C. & Almeida, J. Lins de, **527a.**
Pirumow, C. N., **484a.**
Plazikowski, U., **660a.**
Plichet, A. with Pagniez, P., Laplane, R. & Salles, P., 17a.
Plotnikov, N., **404i.**
Plotnikov, N. N. & Zertschaninov, L. K., **404d, 404h.**
Plum, D., 230a.
Poddar, T. N. with Datta, M. N., **624a.**
Poggi, I., 97a, 97e, 208a.
Poisson, H., Génevois & Lamberton, R., **18f.**
Pologentsev, P. A., **36k.**
Ponomarenko, F. M., **462b.**
Poole, R. F. with Anderson, P. J., Armstrong, G. M., Beach, W. S., Clayton, E. E., Gaines, J. G., Gratz, L. O., Henderson, R. G., Johnson, J. & Miller, P. R., **425c.**
Pop, A., Muresan, E. & Nana, A., **632a.**
Popescu, F. & Mironescu, D. M., **348a.**
Popov, P., **87h.**
Porcelli, A., 234a.
Porter, D. A., **133q,** 133z, **193d, 193e.**
Porter, D. A. with Ackert, J. E. & Beach, T. D., **133h.**
Posselt, A., 147c.
Postiglione, E., **531c.**
Pratt, I. with Ackert, J. E., Eisenbrandt, L. L., Wilmoth, J. H. & Glading, B., **120a.**
Presno, J. A., 440a.
Preston, P. G., **40e.**
Price, C. with Thorne, G., **55c.**
Price, E. W., **160b.**
Price, E. W. & McIntosh, A., 55r.
Prümm, A., 23a.
Punt, A. with Schuurmans Stekhoven, jr., J. H. & Adams, W., **320a.**
Putnam, D. F. & Chapman, L. J., **656a.**
Putnam, D. F. & Thorne, G., **93a.**
Pytel, A., 299a.

Quin, J. I. with Mönnig, H. O., **600b.**
Quiñones, J. F., 368a.

Račić, J., 351a.
Rådulet, V., 452a, 532a.
Rafael Rísquez, J., 546b.
Ragany, J., **585a.**
Rahimuddin, M., 28b.
Rai, S., **453a.**
Ramsay, G. W. St. C., **69a, 317a.**
Randriambeloma with Buck & Lamberton, **165a.**
Rao, M. A. N., **26b, 26c, 240a, 472a.**
Rao, M. A. N. & Ayyar, S., **26a.**
Ravicini, S., **537a.**
Rebrassier, R. E., **385a.**
Reddingius, T., 416a.
Rees, F. G., **295a.**
Rees, W. J., 617b.
Reid, W. D. & Cottier, W., **418a.**
Remuñan, R. with Delgado, R., 302a.
Ribère with Lemaire, G., **22d, 22e.**
Riche, V., Mourgue-Molines, E. & Lonjon, P., 412a.
Rietschel, H., **574a.**
Rietschel, P. E., **189c.**
Rietz, J. H., **526a.**
Riggert, E., **9a.**
Rivera, R. with Kourí, P. & Sellek Azzi, A., 535b.
Roberts, F. H. S., 58b, **298a, 350a, 623a.**
Roberts, G. J., 184e.
Robertson, D., **62a.**
Rodhain, J. & Gavrilov, W., 339a.
Rodhain, J. & Valcke, G., **482a.**

Rollin with Lehucher, 677c.
Roman, E. with Dufourt, A., **579a.**
Romano, N., Maggi, A. & Derqui, M. M., 290a.
Romero Calatayud, A., 437a.
Romiti, C., 69d, 458b.
Roques, P. & Sohier, H., 478a.
Rosario, F. del with Tubangui, M. A., Basaca, M. & Pasco, A. M., **608c.**
Rose, G. with Chen, W. L., **312d.**
Rose, G. & Koh, T. M., **312e.**
Rosenmund, K. W., **335a.**
Ross, I. C. & Gordon, H. McL., **99a.**
Rossi, J. E., **346b.**
Roth, H., **1a.**
Rothfeld, J., **371a.**
Rothfeld, J. with Trawinski, A., **323a.**
Rothschild, M., **155b, 155c.**
Rotter, W., 413a.
Rotter, W. with Peña Chavarría, A., **342c.**
Rouèche, H. & Terrasse, J., 401a, 439a, 564a, 583a.
Ruiz, V., 436a.
Ruiz, V. with Gutiérrez, A., 498a.

Saba, V., 198a.
Sabadini, L., 215a.
Saint, F. E. T., 184d.
Saint-Prix, M. with Berny, P., 358c.
Saito, M., **257a.**
Saito, Y. 132a.
Salah, M., **126d, 126k.**
Salah, M. & Hassan, A., **11a.**
Salah, M. with Hassan, A., **126a.**
Salah, M. with Khalil, M., 126i.
Salam, A. A., **126g.**
Salcedo, R. D. with Fernández, F., 143c.
Salles, P. with Pagniez, P., Plichet, A. & Laplane, R., 17a.
Salmon with Giraud, P. & Jouve, 524c.
Salomon, S., **14a.**
Sampaio Tavares, A., 507b.
Sampedro, M. M., 143b, 143d.
Sanderson, C. J., 330a.
Sandground, J. H., 178f, **650a.**
Sanford, S. P., 565a.
Sarles, M. P. & Stoll, N. R., **133v.**
Sarnelli, T., 13b, 97b.
Sarthou with Velu, H., **582b.**
Sasaki, T., 567a.
Sassuchin, D. N., Tiflow, W. E. & Schulz, R. S., **187c.**
Satta, E., 346c, 471b.
Scaduto, P., **306a.**
Scartozzi, C. & Parvis, F., 376a.
Schafer, F. N., 684d.
Schäfer, W. & Lodenkämper, H., **589a.**
Scheepe, F. L., **235a.**
Scheer, D., 75a.
Scheerer, K., **78.**
Schichobalowa, N. with Schulz, R. E., **404a.**
Schmid, F., **188b.**
Schmidt, K., **342b.**
Schneider, W., **10a.**
Schönmehl, L., **144a.**
Schoop, G., **24a, 228b.**
Schroeder, C. R. & Wegeforth, H. M. **555a.**
Schuchat, I. with Chajutin, D., 404f.
Schuckmann, W. von, 310a.
Schultz, R. E. S. with Skrjabin, K. I., **328.**
Schulz, E., 77d, **189d.**
Schulz, R. E. & Schichobalowa, N., **404a.**
Schulz, R. S. with Sassuchin, D. N. & Tiflow, W. E., **187c.**
Schulz-Schmidtborn, **43a.**
Schuurmans Stekhoven, jr., J. H., **267a, 713, 714.**
Schuurmans Stekhoven, jr., J. H., Adam, W. & Punt, A., **320a.**
Schwartz, B. & Alicata, J. E., **41c.**
Schwenck, J., **195b, 477a.**
Scott, C. E. with Godfrey, G. H., **424b.**
Scott, J. W., 559a.
Scuderi, G., 304a.
Sédan, J. with Joyeux, C. & Esménard, J., 105a.
Seehawer, **322a.**
Segovia, A., 638b.
Sellek Azzi, A. with Kourí, P. & Rivera, R., 535b.
Senevet, G., 715, 716, 717.
Senevet, G. with Gillot, V., 710.
Senevet, G. & Lièvre, H., 718.
Serefeddin Çelik, O., 219a.
Shalimov, L. G., **457c.**
Sherman, G. W., **160v.**
Shimidzu, K., 488a.
Shirai, S. with Tsunoda, T. & Nakamoto, T., **669a.**
Shlyakhman, A. L., Belikov, P. F. & Yagudina, R. N., 397c.
Shtchoupakov, J. G., **673e.**
Sievers, O., **73a.**
Silveira, R. with Kourí, P. & Anido, H., 502a.
Simmons, J. S. & Gentzkow, C. J., 719.
Simon, J. R., **679b.**
Singer, K., **319a.**
Singh, M., **380a.**
Sinha, Bipin Bihari, **294b.**
Skinker, M. S., **41a, 155d, 160a, 431a.**
Składnik, J., **87e, 688a.**
Skrjabin, K. I., **242b.**
Skrjabin, K. I. & Petrow, A. M., **36j.**
Skrjabin, K. I. & Schultz, R. E. S., **328.**
Smirnov, G. G., **675a, 720.**
Smith, R. M. with Bleecker, W. L., **610a.**
Smithers, D. W. with Dixon, H. B. F., 38b, **135a.**

Smorodinzew, I. A. & Bebeschin, K. W., **15a.**
Snijders, E. P., 273a.
Sohier, H. with Roques, P., 478a.
Sohier, R. with Hugonot, G., 356a.
Sokoloff, D. with Caballero, E., 178c.
Soliman, A. M., 517b.
Sorrentino, M., 445a.
Southwell, T. with Blacklock, D. B., **469.**
Spena, A., 153a, **278a, 531d.**
Spink, W. W., 96a.
Spink, W. W. & Augustine, D. L., 121a, 274a.
Spink, W. W. with Theiler, H. & Augustine, D L., **155i.**
Sprehn, C., **721.**
Srivastava, H. D., **155j, 292a, 292b, 292e, 292g, 321e.**
Stader, O., 276b.
Stafford, C. D., 684h.
Stafseth, H. J., **666a.**
Stammer, H. J., 77e.
Stannus, H. S., 428a.
Steinbach, F. G., **684f.**
Steinberg, I. with Goldwater, L. J., Most, H. & Connery, J. E., 417a.
Steiner, G., **55b, 160u.**
Steiner, G. & Buhrer, E. M., **158b.**
Stern, V., 461a.
Sternberg, A M. with Kulkow, A. E., **411a.**
Stévenel, L. & Berny, P., **358a,** 358b.
Stevens, A. R., 670a.
Steward, J. S., **460d.**
Stewart, W. L. & Piercy, S. E., **560a.**
Stiles, C. W. & Baker, C. E., 594a.
Stiller, J. with Lőrincz, F., Ács, L., Czukelter-Szecsődy, J., Makara, G. & Szabolcs, Z., **327.**
Stiven, H., 387a.
Stofberg, J. F. with le Roux J. C., **114a.**
Stoll, N R., **82a, 331a.**
Stoll, N. R. with Sarles, M. P., **133v.**
Stoughton, R. W. with Lamson, P. D., Brown, H. W., Harwood, P. D., Baltzly, R. & Bass, A., **255b, 255d, 255e.**
Strand, E., **544c.**
Strom, G. K., 673a.
Strong, R. P., **448a.**
Stroobants, C., 521a.
Stubbs, E. L. & Live, I., **385c.**
Stunkard, H. W., 390d.
Suárez, M., 604a.
Suárez, V., 504b.
Sugimoto, M., 556a.
Suñer, E. & Larregla, S., 620a.
Sutter, R. with Kourí, P, & Basnuevo, J. G., 641c.
Swales, W. E., **19a, 177a.**
Sweet, W. C. with Jacocks, W. P. & Kendrick, J. F., 377a.
Sylvers, I., **443a.**
Syôgaki, Y. with Kobayashi, H., 506a.
Szabó, K., 324a, 601a.
Szabolcs, Z. with Lőrincz, F., Ács, L., Czukelter-Szecsődy, J., Makara, G. & Stiller, J., **327.**
Szidat, **652a.**
Szidat, U., **76a.**

Tagg, J., **314a.**
Takasaki, J., 567c.
Talbot, S. B. with Culbertson, J. T., **448b.**
Taniguchi, R., **614a.**
Tao, C. S., Yu, T. H., Chu, P. J. & Wang, C., 107c.
Tao, C. S. with Yu, T. H., Chu, P. J. & Wang, C., 312x.
Tao, S. with Komiya, Y. & Kawana, K., **312o.**
Tao, S. C. with Komiya, Y. & Kawana, H., 569b.
Tao, S. M., **312z.**
Tarquinii, C., 213a.
Taylor, A. L., **55e.**
Taylor, E. L., **6a, 70b, 125a, 133b, 155a, 161a, 184a, 184b, 389a,** 460b, **460c.**
Taylor, H. W. Y., **312t.**
Taylor, J. N., **626a.**
Teichler, G., **95a.**
Tenhaeff, C. & Ferwerda, S. F., **176a.**
Terrasse, J. with Rouèche, H., 401a, 439a, 564a, 583a.
Tetley, J. H., **33g, 270a.**
Thapar, G. S. & Lal, M. B., **294e.**
Theiler, G., **661a.**
Theiler, H. & Augustine, D. L., **465b.**
Theiler, H., Augustine, D. L. & Spink, W. W., **155i.**
Thompson, H. G. with Gray, J., **312ze.**
Thompson, H. G. with Li, T. Y., 312s.
Thorne, G., **55d, 120b, 160s, 244a.**
Thorne, G. & Price, C., **55c.**
Thorne, G. with Putnam, D. F., **93a.**
Thwaite, J. W., 183a.
Tiflow, W. E. with Sassuchin, D. N. & Schulz, R. S., **187c.**
Tigelaar, A. H., **272b.**
Tillier, Le Genissel & Goinard, 515a.
Tillier, R. with Duboucher, H. & Blondeau, A., 515c.
Timmermans, F., 381a.
Timon-David, J., **214b.**
Timpano, P., **89a.**
Tisseuil, J., **18d, 221a.**
To, S. & Ko, B., **665a.**
Tonking, H. D., 112a.
Toole, H., 488c, 488d.
Toryu, Y., **654a.**
Tötterman, G., 541a.
Travassos, L., **476b, 527d, 640e.**
Travers, S. J. with Jary, S. G., **137a.**

Trawiński, A., **72d**, **188a**, 622b.
Trawiński, A. & Rothfeld, J., **323a**.
Triffitt, M. J., **127a**, **127i**.
Triffitt, M. J. & Hurst, R. H., **388c**.
Triffitt, M. J. with Hurst, R. H., **388a**, **388b**.
Truc, E. with Jeanbrau, E. & Héran, J., 491b.
Tschebotarew, R. S. with Palimpsestow, M. A., **454b**.
Tseng, Shen, **283a**.
Tsunoda, T., Shirai, S. & Nakemoto, T., **669a**.
Tubangui, M. A., **156b**, 628a.
Tubangui, M. A., Basaca, M., Pasco, A. M. & Rosario, F. del, **608c**.
Tubangui, M. A. & Masilungan, V. A., **608b**.
Tubangui, M. A. with Yutuc, L. M., **423b**.
Tufts, W. P. & Day, L. H., **293a**.
Turner, E. L., Dennis, E. W. & Berberian, D. A., **126m**, **133c**.
Tuxford, A. S., 140a.
Tyzzer, E. E., **36a**.

Uchida, C. with Miyamoto, S., 174a.
Ujiie, N., 308a, **453b**.
Underwood, P. C., **49c**.
Unzaga González, J. de, 406a, 406b.
Urbain, A. & Bullier, P., 512a, 516a.
Uttley K. H., **363b**.
Uyeno, H., **51a**, **154b**, **154c**.

Vajda, T., **689a**.
Valcke, G., 197a.
Valcke, G. with Rodhain, J., 482a.
Valdés Lambea, 405a.
Valkányi, R., 185a.
Vallarino, D. & Cichero, C., 657c.
Valverde, A. with Kourí, P., 588a, 641a.
Van Gundy, C. O., **178j**.
Van Slype, W., 197b.
Van Volkenberg, H. L., **519a**.
Vassilkova, Z., **404c**.
Vaz, Z., **494b**, **494c**, **494d**, **494f**, **631a**.
Vaz, Z. & Pereira, C., 68g.
Veitch, R., **58c**.
Velu, H., 101a.
Velu, H. & Sarthou, **582b**.
Ventura, A., 159a.
Vercesi, R., 493a.
Vergeer, T., **36s**.
Verma, S. C., **615b**.
Vernetti Blina, L., 587a, 587b.
Viglietta, C., 282a.
Vignardou, M. with Goinard, P., 558a.
Vignaud, R. with Mathias, P., **366a**.
Viljoen, N. F., 258a.
Villiers, O. T. de with Maré, G. S., **136a**.
Víquez, C., **722**.
Vitale, A., **50a**.
Vivó, J., 641b.
Vo can can, M., 358d.
Voegtlin, W. L. with Peacock, A. H., 277a.
Vogel, H., **312p**.
Vogel, H., Wu, K. & Watt, J.Y.C., **312c**.
Vorobieva, E. I. with Zawadowsky, M. M., 672a.
Vos, J. J. T., 235b.
Voss, J. A., 47a.
Vovan-Can, 723.
Vuylsteke, C., **650b**, **650c**.

Waele, A. de, **511a**, 686a.
Wagemann, H., **211a**.
Wagner, H., **228a**.
Wagner, O., **73b**.
Waite, C. H. & Gorrie, R., **121c**.
Wallace, F. G., 133a.
Walton, A. C., **36d**, **133zb**.
Walton, C. L., Ogilvie, L. & Mulligan, B. O., **123a**.
Wanderley, F. with Lins, M., 301a.
Wang, C. with Tao, C. S., Yu, T. H. & Chu, P. J., 107c.
Wang, C. with Yu, T. H., Chu, P. J. & Tao, C. S., 312x.
Ward, C. B. with Lamson, P. D. & Brown, H. W., **255a**.
Ward, H. B., **724**.
Wardle, R. A., **103a**.
Warren, M. with Drake, E. H. & Hawkes, R. S., **384a**.
Warwick, M., 192a.
Watanabe, M., 154d, 154f.
Watson, A. H., 70c.
Watson, W. H., **25a**.
Watt, J. Y. C. with Vogel, H. & Wu, K., **312c**.
Wegeforth, H. M. with Schroeder, C. R., 555a.
Wegner, J., 226a.
Wehr, E. E., **160n**, **259a**.
Wehr, E. E. & Dikmans, G., **189a**.
Wehr, E. E. with Dikmans, G., **551**.
Weniger, H., **725**.
West, R. M., **68b**.
Wetzel, **24b**.
Wetzel, R., **659a**, **692a**.
Wetzel, R. & Müller, F. R., **369a**.
Wheaton, E. with Hopkins, S. H., **133zd**.
Whittle, W. O. & Drain, B. D., 530a.
Wickramasuriya, G. A. W., 252a.
Wigand, R., 463a, **465a**.
Wilde, H., 542a.
Willey, C. H., **68a**, **566a**.
Williams, O. L. with Kofoid, C. A., **206a**.
Wilmoth, J. H. with Ackert, J. E., Eisenbrandt, L. L., Glading, B. & Pratt, I., **120a**.
Wilson, C., **687a**.
Wilson, J. E. with Newbigin, H. F., **179a**.

Wilson, R. P. with El-Tobgy, A. F., 517a.
Windhausen, R., **726.**
Winfield, G. F., **312zc.**
Wiśniewski, L. W., **514b**, 533a.
Wite, L., **673f.**
Wite, L. E. with Dansker, V. N. & Alexander, L. L., **673b.**
Wittmers, F., 147b.
Wolffhügel, K., **462a.**
Wolter, A., 95b.
Wolter, E., **727.**
Wood, J. I., **286b.**
Wood, J. I. with Edson, H. A. & Miller, P. R., **609a.**
Wood, J. I. with Humphrey, H. B., **286a.**
Wood, W. A., 184f.
Woodbury, L. A., **133zc.**
Woodhead, A. E., **390c.**
Woodland, W. N. F., 92a, **155f, 617a.**
Woolcock, V., **155h.**
Wright, R. E., Iyer, P. V. S. & Pandit, C. G., **116a.**
Wright, W. H., **55j**, 315a, 315b, 385d.
Wright, W. H. & Bozicevich, J., **152a.**
Wright, W. H. with Bozicevich, J., **684e.**
Wu, K., **107e.**
Wu, K. with Vogel, H. & Watt, J. Y. C., **312c.**
Wu, L. C., 20b.
Ximénez del Rey, M. & Laporta Bort, L., 367a, 437b.

Yagudina, R. N. with Shlyakhman, A. L. & Belikov, P. F., 397c.
Yamaguti, S., 75b, **383a, 383b, 383c, 383d, 383f, 383g, 383h, 383i, 383j, 390k, 464a.**
Yamasaki, M., **243a.**
Yao, K. F. with Feng, L. C., 107g.
Yao, Y. T. & Chu, H. J., 312w.
Yao, Y. T., Hsu, S. C. & Ling, L. C., **312u**, 312v.
Yen, C. H. & Chang, T. L., 262a.
Yen, C. H. with Hu, S. M. K., **312a.**
Yoshida, S., **312q.**
Young, R. T., **178i.**
Young, S., 312h, 569a.
Yu, T. H., Chu, P. J., Wang, C. & Tao, C. S., 312x.
Yu, T. H. with Tao, C. S., Chu, P. J. & Wang, C., 107c.
Yutuc, L. M. & Tubangui, M. A., **423b.**

Zau, F. D., 107d.
Zawadowsky, M. M. & Vorobieva, E. I., 672a.
Zertschaninov, L. K. with Plotnikov, N. N., **404d, 404h.**
Ziemann, H., **265a.**
Zunker, M., **72a, 466a.**
Zvjaguinzev, S. N., **672b.**
Zwirn, D., Joyeux, C. & Aboucaya, A., 142a.

INDEX OF PERIODICALS.

(The reference is to the serial numbers: not to the pages.)

Acta Instituti et Musei Zoologici Universitatis Atheniensis, 470.
Acta Medica Scandinavica, 79.
Acta Pathologica et Microbiologica Scandinavica, 1, 80.
Acta Pontificiae Academiae Scientiarum Novi Lyncaei, 471.
Acta Radiologica, 191.
Actas de la Sociedad de Cirugia de Madrid, 329.
Advisory Leaflet. Ministry of Agriculture and Fisheries. London, 2.
Agricultural Gazette of New South Wales, 81, 330.
Agriculture and Live-Stock in India, 472.
American Journal of Clinical Pathology, 192.
American Journal of Hygiene, 3, 82, 193, 331.
American Journal of Pathology, 83.
American Journal of Tropical Medicine, 84, 332.
American Journal of Tropical Medicine (Supplement), 194.
American Midland Naturalist, 473.
Anales de la Facultad de Medicina de Montevideo, 474.
Anales del Instituto de Biología, 85, 475.
Anales de Medicina Interna, 333.
Anales de Pediatria, 334.
Angewandte Chemie, 335.
Annaes da Academia Brasileira de Sciencias, 476.
Annaes Paulistas de Medicina e Cirurgia, 195, 477.
Annales d'Anatomie Pathologique et d'Anatomie Normale Médico-Chirurgicale, 478.
Annales de Médecine, 479.
Annales de Médecine et de Pharmacie Coloniales, 86, 336.
Annales du Musée d'Histoire Naturelle de Marseille, 480.
Annales d'Oculistique, 337.
Annales de Parasitologie Humaine et Comparée, 4, 87, 196, 338.
Annales Scientifiques de l'Université de Jassy, 481.
Annales de la Société Belge de Médecine Tropicale, 88, 197, 339, 482.
Annali d'Igiene, 5, 89.
Annali di Ottalmologia e Clinica Oculistica, 198, 483.
Annals of Applied Biology, 6.
Annals of Internal Medicine, 199.
Annals and Magazine of Natural History, 7, 90, 200, 340.
Annals of Surgery, 91, 201.
Annals of Tropical Medicine and Parasitology, 92, 341.
Annual Report (14th) of the Canadian Plant Disease Survey for 1934, 93.
Annual Report (20th) of the Experimental and Research Station, Cheshunt for 1934, 94.
Annual Report (25th-26th) of the Quebec Society for the Protection of Plants, 8, 629.
Arbeiten über Physiologische und Angewandte Entomologie aus Berlin-Dahlem, 9.
Arbeiten des Tropeninstituts des Volksgesundheits Kommissariat der SSR Armenien, 484.
Arbeiten der Turkmenischen Landwirtschaftlichen Hochschule, 485.
Archief voor de Koffiecultuur, 486.
Archiv für Dermatologie und Syphilis, 202.
Archiv für Hydrobiologie und Planktonkunde, 10, 487.
Archiv für Kinderheilkunde, 203.
Archiv für Klinische Chirurgie, 488.
Archiv für Schiffs- und Tropen-Hygiene, 11, 95, 342, 489.
Archiv für Wissenschaftliche und Praktische Tierheilkunde, 490.
Archives de l'Institut Pasteur d'Algérie, 12.
Archives of Internal Medicine, 96.
Archives Internationales de Pharmacodynamie et de Thérapie, 204.
Archives du Muséum d'Histoire Naturelle, 343.
Archives of Neurology and Psychiatry, 205.
Archives of Ophthalmology, 206, 344.
Archives of Pathology, 207.
Archives de la Société des Sciences Médicales et Biologiques de Montpellier, 491.
Archivio Italiano di Chirurgia, 345.
Archivio Italiano delle Malattie dell' Apparato Digerente, 492.
Archivio Italiano di Scienze Mediche Coloniali, 13, 97, 208, 346.
Archivio di Radiologia, 493.
Archivos do Instituto Biologico, 494.
Archivos de Medicina Infantil, 495.
Archivos de Medicina Interna, 347, 496.
Archivos de la Sociedad de Biología de Montevideo, 497.
Archivos Uruguayos de Medicina, Cirugía y Especialidades, 98.
Arhiva Veterinara, 348.
Arquivos de Cirurgia e Ortopedia, 498.

Askerî Tibbi Baytarî Mecmuasi, 349.
Australian and New Zealand Journal of Surgery, 209.
Australian Veterinary Journal, 99, 350.

Bahia Medica, 210.
Beiträge zur Klinischen Chirurgie, 351.
Berliner Tierärztliche Wochenschrift, 14, 211, 352.
Biochemische Zeitschrift, 15.
Boletín de la Academia de Ciencias Exactas, Físicas y Naturales, 499.
Boletín de la Academia Nacional de Medicina de Buenos Aires, 500.
Boletín del Instituto de Clínica Quirúrgica, 212, 501.
Boletin Mensual de la Clinica de la Asociación de Damas de La Covadonga, 502.
Boletín de la Sociedad Española de Historia Natural, 503.
Boletines y Trabajos de la Sociedad de Cirugía de Buenos Aires, 353, 504.
Bollettino e Memorie della Società Piemontese di Chirurgia, 213.
Bollettino delle Scienze Mediche. Bologna, 505.
Botany and Zoology, 506.
Brasil-Medico, 507.
British Journal of Urology, 508.
British Medical Journal, 100, 354.
Bronchoscopie, Oesophagoscopie et Gastroscopie, 509.
Buletinul Societăţii de Ştiinţe din Cluj, 510.
Bulletin de l'Académie de Médecine. Paris, 101, 355.
Bulletin de l'Académie Royale de Belgique. Classe des Sciences, 511.
Bulletin de l'Académie Vétérinaire de France, 102, 512.
Bulletin of the Biological Board of Canada, 103.
Bulletin. Canterbury Agricultural College. New Zealand, 513.
Bulletin de l'Institut Océanographique, 214.
Bulletin International de l'Académie Polonaise des Sciences et des Lettres, Classe des Sciences Mathématiques et Naturelles, Série B: Sciences Naturelles, (II.), 514.
Bulletins et Mémoires de la Société Médicale des Hôpitaux de Paris, 17.
Bulletins et Mémoires de la Société Nationale de Chirurgie, 215.
Bulletins et Mémoires de la Société de Radiologie Médicale de France, 515.
Bulletin Mensuel de l'Office International d'Hygiène Publique, 216.
Bulletin Mensuel. Société de Médecine Militaire Française, 356.
Bulletin. Ministry of Agriculture and Fisheries. London, 16.
Bulletin du Musée d'Histoire Naturelle, 516.
Bulletin of the Mysore Coffee Experiment Station. Department of Agriculture, Bangalore, 217.
Bulletin of the Ophthalmological Society of Egypt, 517.
Bulletin Ornithologique Romand, 518.
Bulletin of the Puerto Rico Agricultural Experiment Station, 519.
Bulletin of the San Juan de Dios Hospital of Manila, 520.
Bulletin de la Société Belge d'Ophtalmologie, 521.
Bulletin de la Société d'Études Scientifiques d'Angers, 522.
Bulletin de la Société Française d'Urologie, 218, 357.
Bulletins de la Société de Médecine Turque, 219.
Bulletin de la Société Médico-Chirurgicale de l'Indochine, 104, 220.
Bulletin de la Société de Pathologie Exotique, 18, 105, 221, 358, 523.
Bulletins de la Société de Pédiatrie de Paris, 524.
Bulletin de la Société Zoologique de France, 359, 525.
Bulletin des Travaux Publiés par la Station d'Aquiculture et de Pêche de Castiglione, 360.
Bulletin of the West Virginia University Agricultural Experiment Station, 526.

Campo. Agricultura, Industria, Commercio. Rio de Janeiro, 527.
Canadian Journal of Research, 19, 106, 361.
Canadian Public Health Journal, 362.
Capita Zoologica, 528.
China Journal, 529.
Chinese Medical Journal, 20, 107, 363.
Circular. Tennessee Agricultural Experiment Station, 530.
Clínica y Laboratorio, 364.
Clinica Veterinaria. Milano, 531.
Clinical Journal, 222.
Clujul Medical, 223, 532.
Compte Rendu Mensuel des Séances de la Classe des Sciences Mathématiques et Naturelles. Académie Polonaise des Sciences et des Lettres. Cracovie, 533.
Comptes Rendus des Séances de l'Académie des Sciences, 21, 108, 365.
Comptes Rendus des Séances de la Société de Biologie, 22, 109, 224, 366.

Cornell Veterinarian, 534.
Crónica Médica Valencia, 367.
Crónica-Médico Quirúrgica de la Habana, 225, 368, 535.

Deutsche Landwirtschaftliche Geflügelzeitung, 226.
Deutsche Medizinische Wochenschrift, 23, 110.
Deutsche Pelztierzüchter, 227, 369.
Deutsche Schlachthofzeitung, 111.
Deutsche Tierärztliche Wochenschrift, 24, 228, 370.
Deutsche Zeitschrift für Nervenheilkunde, 371.
Deutsche Zuckerindustrie, 536.
Difesa Sociale, 537.
Duodecim, Lääketieteellinen Aikakauskirja, 229.

East African Medical Journal, 25, 112, 230, 372.
Écho Médical du Nord, 231, 373, 538.
Ergebnisse der Gesamten Medizin, 539.

Farmers' Bulletin. U.S. Department of Agriculture, 113.
Farming in South Africa, 114, 232, 540.
Finska Läkaresällskapets Handlingar, 541.
Fischereizeitung, 542.
Folia Clinica et Biologica, 543.
Folia Zoologica et Hydrobiologica, 544.
Forze Sanitarie, 374.
Frankfurter Zeitschrift für Pathologie, 545.

Gaceta Médica de Caracas, 546.
Gazette Hebdomadaire des Sciences Médicales de Bordeaux, 233.
Gazette Médicale de France, 547.
Gazzetta Internazionale di Medicina e Chirurgia, 234, 375, 548.
Geneeskundig Tijdschrift voor Nederlandsch-Indië, 115, 235.
Giornale di Batteriologia e Immunologia, 376.
Giornale Italiano di Malattie Esotiche e Tropicali ed Igiene Coloniale, 549.

Hong Kong Naturalist, 236.
Hospital, 237.
Hygeia, Chicago, 238.

Imperial Bureau of Agricultural Parasitology. Publications, 239.
Indian Journal of Medical Research, 116, 377.
Indian Journal of Pediatrics, 550.
Indian Journal of Veterinary Science and Animal Husbandry, 26, 117, 240, 378.
Indian Medical Gazette, 27, 118, 241, 379.
Indian Veterinary Journal, 28, 380, 551.
Industria Saccarifera Italiana, 552.
International Veterinary Congress (12th), New York, 242.

Jahreskurse für Ärztliche Fortbildung, 381.
Japanese Journal of Experimental Medicine, 119, 243, 382.
Japanese Journal of Zoology, 383, 553.
Journal of Agricultural Research, 120, 244.
Journal of the American Medical Association, 29, 121, 384, 554.
Journal of the American Veterinary Medical Association, 30, 122, 245, 385, 555.
Journal of Animal Ecology, 386.
Journal of the Bath and West and Southern Counties Society, 123.
Journal of the Central Society for Veterinary Medicine, Tokyo, 556.
Journal of Chemotherapy, 557.
Journal de Chirurgie, 558.
Journal of the Chosen Medical Association, 124, 246.
Journal of the Colorado-Wyoming Academy of Sciences, 559.
Journal of Comparative Pathology and Therapeutics, 125, 247, 560.
Journal of the Council for Scientific and Industrial Research, 31.
Journal of the Egyptian Medical Association, 32, 126, 387.
Journal of Helminthology, 33, 127, 388.
Journal of Heredity, 128.
Journal of the Japanese Society of Veterinary Science, 129, 561.
Journal of Laboratory and Clinical Medicine, 34, 130.
Journal-Lancet, 248.
Journal of the Marine Biological Association of the United Kingdom, 562.
Journal de Médecine de Bordeaux et de la Région du Sud-Ouest, 563.
Journal de Médecine de Lyon, 249.
Journal de Médecine de Paris, 564.
Journal of the Medical Association of Georgia, 565.
Journal of the Ministry of Agriculture, London, 35, 131, 389.
Journal of Morphology, 566.
Journal of the Mount Sinai Hospital, 250.
Journal of the New York Entomological Society, 251.
Journal of Obstetrics and Gynaecology of the British Empire, 252.
Journal of Oriental Medicine, 132, 253.
Journal of Parasitology, 36, 133, 390.

Journal of Pathology and Bacteriology, 37.
Journal of Pediatrics, 254.
Journal of Pharmacology and Experimental Therapeutics, 255.
Journal of the Philippine Islands Medical Association, 134, 256, 391.
Journal of the Public Health Association of Japan, 257, 567.
Journal of the Royal Army Medical Corps, 38, 135, 392.
Journal of the Royal Army Veterinary Corps, 393.
Journal of Science of the Hiroshima University, Series B, Division I, Zoology, 568.
Journal of the Shanghai Science Institute. Section IV, 569.
Journal of the South African Veterinary Medical Association, 136, 258, 570.
Journal of the South-Eastern Agricultural College, Wye, Kent, 39, 137.
Journal of the Tennessee Academy of Science, 571.
Journal of Tropical Medicine and Hygiene, 40, 138, 394.
Journal d'Urologie Médicale et Chirurgicale, 395, 572.
Journal of the Washington Academy of Sciences, 41, 139, 259.
Jugoslovenski Veterinarski Glasnik, 573.

Kinderärztliche Praxis, 260, 574.
Kitasato Archives of Experimental Medicine, 396.
Klinicheskaya Meditsina, 397, 575.
Klinike. Athens, 576.
Kongelige Norske Videnskabers Selskabs Forhandlinger, 577.

Lancet, 140, 261, 398.
Lingnan Science Journal, 42, 141, 262, 578.
Lyon Médical, 579.

Maanedsskrift for Dyrlaeger, 399, 580.
Magasin de Parasitologie de l'Institut Zoologique de l'Académie des Sciences de l'URSS, 400, 581.
Maroc Médical, 582.
Marseille Médical, 142.
Médecine Infantile, 401, 583.
Medical Journal of Australia, 263, 402.
Medical Officer, 264, 403.
Medical Parasitology and Parasitic Diseases, 404.
Medical Press and Circular, 584.
Medical Record, 585.
Medicina Ibera, 405, 586.
Medicina del Lavoro, 587.
Medicina, Madrid, 406.
Medicina de los Países Cálidos, 143, 588.
Medicina. Revista Mexicana, 407.
Medizinische Klinik, 43, 265.
Medizinische Welt, 144, 266, 408, 589.
Mémoires du Musée Royal d'Histoire Naturelle de Belgique, 267.
Memoirs of the Faculty of Science and Agriculture, Taihoku, 590.
Memorias do Instituto Oswaldo Cruz, 145, 268, 409.
Memorias de la Sociedad Cubana de Historia Natural "Felipe Poey", 591.
Minerva Medica, 410.
Mitteilungen für die Landwirtschaft, 146.
Monatsschrift für Kinderheilkunde, 592.
Monatsschrift für Psychiatrie und Neurologie, 269, 411.
Montpellier Médical, 412.
Morgagni, 593.
Münchener Medizinische Wochenschrift, 44, 147, 413.
Münchener Tierärztliche Wochenschrift, 414.
Mycologia, 148.

Nagasaki Igakkwai Zassi, 415.
National Institute of Health Bulletin. United States Public Health Service, 594.
Nature, 149, 270.
Nebraska State Medical Journal, 271.
Nederlandsch-Indische Bladen voor Diergeneeskunde en Dierenteelt, 150, 272, 595.
Nederlandsch Tijdschrift voor Geneeskunde, 273, 416.
New England Journal of Medicine, 274, 417.
New Orleans Medical and Surgical Journal, 45.
New Zealand Journal of Agriculture, 46, 151, 418.
New Zealand Medical Journal, 275, 596.
Norsk Magasin for Laegevidenskapen, 47.
Norsk Veterinaer-Tidsskrift, 48, 419.
North American Veterinarian, 49, 152, 276, 597.
Northwest Medicine, 277.
Novy Khirurgicheskiy Arkhiv, 420.
Nuova Veterinaria, 50, 153, 278.
Nuovo Ercolani, 598.

Ohio Journal of Science, 599.
Ohio State Medical Journal, 279.
Okayama-Igakkai-Zasshi, 51, 154.

Onderstepoort Journal of Veterinary Science and Animal Industry, 280, 600.
Orvosi Hetilap, 601.

Pacific Science Congress (5th). Dominion Laboratory of Plant Pathology, Canada, 281.
Pamietnik (XIV) Zjazdu Lekarzy i Przyrodników Polskich w Poznaniu 1933, 602.
Papers of the Michigan Academy of Science, Arts and Letters, 603.
Parasitology, 52, 155, 421.
Pediatria, 282.
Pediatría Española, 604.
Pediatria del Medico Pratico, 605.
Pediatria Practica, 422.
Pediatría y Puericultura, 53.
Peking Natural History Bulletin, 283, 606.
Pharmaceutical Journal, 607.
Philippine Journal of Animal Industry, 423.
Philippine Journal of Science, 156, 284, 608.
Physiological Reviews, 157.
Phytopathology, 54, 424.
Plant Disease Reporter, 158, 285, 425.
Plant Disease Reporter. Supplement, 286, 609.
Plant Protection, 426.
Policlinico (Sezione Chirurgica), 287.
Policlinico (Sezione Pratica), 159, 427.
Post-Graduate Medical Journal, 428.
Poultry Science, 288, 610.
Practitioner, 289, 429.
Prager Tierärztliches Archiv, 611.
Prensa Médica Argentina, 290.
Presse Médicale, 291, 612.
Proceedings of the Academy of Sciences (United Provinces of Agra and Oudh, India), 292, 613.
Proceedings of the American Society for Horticultural Science for 1934, 293.
Proceedings of the Helminthological Society of Washington, 55, 160.
Proceedings of the Imperial Academy (of Japan), 614.
Proceedings of the Indian Academy of Sciences, Section B, 56, 294, 430, 615.
Proceedings of the Royal Academy of Sciences, Amsterdam, 616.
Proceedings of the Royal Society of Medicine, 57, 161.
Proceedings of the Society for Experimental Biology and Medicine, 162.
Proceedings of the United States National Museum, 163, 431.
Proceedings of the Zoological Society of London, 295, 432, 617.

Profilassi, 618.
Progrès Médical, 619.
Progresos de la Clínica, 296, 620.
Progress Notes, Animal Husbandry Division, Hawaii Agricultural Experiment Station, 621.
Przegląd Weterynaryjny, 622.
Puerto Rico Journal of Public Health and Tropical Medicine, 297, 433.

Queensland Agricultural Journal, 58, 298, 623.

Radiologia Medica, Rivista Mensile, 434.
Records of the Indian Museum, 164, 624.
Recueil de Médecine Vétérinaire, 165, 625.
Report of the Cheltenham College Natural History Society for the Year 1934, 626.
Report of the Chief of the Bureau of Animal Industry, United States Department of Agriculture, 435.
Report (4th) of the Director of the Institute of Animal Pathology, Cambridge, 627.
Report. National Research Council of the Philippine Islands for 1935, 628.
Reports (25th-26th) of the Quebec Society for the Protection of Plants, 8, 629.
Résultats des Campagnes Scientifiques Accomplies par le Prince Albert I. Monaco, 630.
Revista de Biologia e Hygiene. São Paulo, 631.
Revista de Chirurgie. Bucureşti, 632.
Revista de Cirugía de Barcelona, 299.
Revista de Cirugía de Buenos Aires, 436.
Revista do Departamento Nacional da Producção Animal, 633.
Revista Española de Cirugia, 634.
Revista Española de las Enfermedades del Aparato Digestivo y de la Nutrición, 437.
Revista de Gynecologia e d'Obstetricia, 300.
Revista Médica de Canarias, 635.
Revista Médica Cubana, 636.
Revista Médica Latino-Americana, 438.
Revista Médica de Pernambuco, 301.
Revista Médica del Rosario, 302, 637.
Revista Médica Veracruzana, 439, 638.
Revista de Medicina y Cirugía de la Habana, 440, 639.
Revista Medico-Cirurgica do Brazil, 166, 640.
Revista de Parasitologia, Clínica y Laboratorio, 641.

Revista de Tuberculosis del Uruguay, 441, 642.
Revue Belge des Sciences Médicales, 643.
Revue de Chirurgie, 167, 303.
Revue Française de Pédiatrie, 644.
Revue de Médecine et d'Hygiène Tropicales, 442.
Revue Médicale de la Suisse Romande, 645.
Revue de Microbiologie, d'Épidemiologie et de Parasitologie, 443.
Revue de Pathologie Comparée et d'Hygiène Générale, 646.
Revue Suisse de Zoologie, 59, 647.
Revue Vétérinaire et Journal de Médecine Vétérinaire et de Zootechnie, 648.
Revue Vétérinaire Militaire, 444, 649.
Revue de Zoologie Agricole et Appliquée, 168.
Revue de Zoologie et de Botanique Africaines, 60, 650.
Riforma Medica, 304, 445.
Rinascenza Medica, 305.
Rivista Sanitaria Siciliana, 306, 446, 651.

Schriften der Physikalisch-Ökonomischen Gesellschaft zu Königsberg, 652.
Schweizer Archiv für Tierheilkunde, 169, 447, 653.
Schweizerische Medizinische Wochenschrift, 170.
Science, 448.
Science Reports of the Tôhoku Imperial University. Series IV. Biology, 654.
Science Reports of the Tokyo Bunrika Daigaku. Section B, 655.
Scientific Agriculture, 656.
Scientific Horticulture, 61.
Scientific Monograph. Imperial Council of Agricultural Research. India, 449.
Scottish Journal of Agriculture, 62.
Semana Médica, 63, 171, 657.
Sinensia. Contributions from the Metropolitan Museum of Natural History, Nanking, 658.
Sitzungsberichte der Gesellschaft Naturforschender Freunde zu Berlin, 172, 659.
Skandinavisk Veterinär-Tidskrift, 307, 660.
South African Journal of Science, 661.
South African Medical Journal, 64, 173, 450.
Southern Medical Journal, 451.
Sovetskaya Khirurgiya, 662.
Sovetskaya Vrachebnaya Gazeta, 663.
Sovetskiy Vestnik Oftalmologii, 664.
Spitalul. Revistă Medicală Lunară, 452.

Taiwan Igakkai Zasshi, 65, 174, 308, 453, 665.
Technical Bulletin. Michigan Agricultural Experiment Station, 666.
Technical Bulletin. United States Department of Agriculture, 667.
Tidsskrift for Planteavl, 309.
Tierärztliche Mitteilungen, 310.
Tierärztliche Rundschau, 66, 175, 454.
Tijdschrift voor Diergeneeskunde, 67, 176, 311, 455.
Trabalho do Centro de Estudos e Prophylaxia da Lepra, 668.
Transactiones Societatis Pathologicae Japonicae, 669.
Transactions of the American Association of Genito-Urinary Surgeons, 670.
Transactions (21st) American Game Conference, 177.
Transactions of the American Laryngological Association, 671.
Transactions of the American Microscopical Society, 68, 178, 456.
Transactions on the Dynamics of Development, 457, 672.
Transactions of the Far Eastern Association of Tropical Medicine (9th Congress), 312.
Transactions of the Highland and Agricultural Society of Scotland, 179.
Transactions of the Pasteur Institute of Epidemiology and Bacteriology in Leningrad, 673.
Transactions of the Royal Society of Tropical Medicine and Hygiene, 69, 180, 458.
Travaux et Comptes Rendus. Institut de Recherches des Forêts d'État à Varsovie, 674.
Travaux de la Filiale de l'Académie des Sciences de l'USSR au Tadjykistan, 675.
Travaux de la Station Zoologique de Wimereux, 676.
Tropical Agriculture, 181.
Tunisie Médicale, 677.

Ugeskrift for Laeger, 313.
Union Médicale du Canada, 678.
University of Wyoming Publications, 679.
Urologic and Cutaneous Review, 459.

Verhandlungen der Naturforschenden Gesellschaft in Basel, 182.
Veterinäre Gesundheitsdienst. (Published as Prager Tierärztliches Archiv. Sonderheft.), 680.

Veterinarski Arhiv, 681.
Veterinary Bulletin. Civil Veterinary Department. Punjab, 682.
Veterinary Journal, 183, 314, 683.
Veterinary Medicine, 315, 684.
Veterinary Record, 70, 184, 460.
Vida Nueva, 685.
Virginia Medical Monthly, 316.
Vlaamsch Diergeneeskundig Tijdschrift, 686.

West African Medical Journal, 317, 687.
Wiadomości Weterynaryjne, 688.
Wiener Klinische Wochenschrift, 71, 185, 461.
Wiener Tierärztliche Monatsschrift, 689.
Wissenschaftliche Berichte der Moskauer Staats-Universität, 690.

Zeitschrift für Augenheilkunde, 691.
Zeitschrift für Brieftaubenkunde, 692.
Zeitschrift für Fleisch- und Milchhygiene, 72, 186, 318.
Zeitschrift für die Gesamte Experimentelle Medizin, 319.
Zeitschrift für Immunitätsforschung und Experimentelle Therapie, 73.
Zeitschrift für Infektionskrankheiten, Parasitäre Krankheiten und Hygiene der Haustiere, 74, 462.
Zeitschrift für Klinische Medizin, 463.
Zeitschrift für Morphologie und Ökologie der Tiere, 320.
Zeitschrift für Parasitenkunde, 75, 187, 321, 464.
Zeitschrift für Urologie, 693.
Zeitschrift für Vergleichende Physiologie, 694.
Zeitschrift für Veterinärkunde, 322.
Zentralblatt für Allgemeine Pathologie und Pathologische Anatomie, 695.
Zentralblatt für Bakteriologie. Abteilung I. Originale, 76, 188, 323, 465.
Zentralblatt für Bakteriologie. Abteilung I. Referate, 466.
Zentralblatt für Chirurgie, 324, 467.
Zoogeographica, 325, 696.
Zoologische Jahrbücher. Abteilung für Systematik, Ökologie und Geographie der Tiere, 326.
Zoologischer Anzeiger, 77, 189, 468.
Zvěrolékařské Rozpravy, 697.

(The reference is to the serial numbers : numbers in bold type indicate abstracts.)

Acanthamyops flavus, *Mermis myrmecophila* in **626a**.
Acanthatrium to *Lecithodendrium* **292h**.
Acanthobothrium ponticum 481a.
Acanthocephala in fishes in India **624a**.
—, genitalia 506c.
— from Japan **383d**.
—, larval stages 390m.
— in *Lota vulgaris* 390m.
— monographed **701**.
Acanthocephaloides rhinoplagusiae n. sp. **383d**.
Acanthocephalus acerbus to *A. echigoensis* **590a**.
— *aculeatus* to *A. echigoensis* **590a**.
— *bufonis* redescribed **480a**.
— *lucidus* to *A. artatus* **590a**.
— *minor* n. sp. **383d**.
— *oncorhynchi* to *A. echigoensis* **590a**.
— *opsalichthydis* n. sp. **383d**.
Acartia, *Hemiurus communis* in 562a.
Accacoeliidae classified **360a**.
Accipiter virgatus, *Paracladotaenia* n. g., n. sp. in **383b**.
Acrobeles glaphyrus n. sp. in *Polyanthes tuberosa* **55b**.
Actinolaimus africanus **544b**.
Adolpholutzia lutzi n. g., n. sp. **640e**.
Aëdes vexans, intermediary for *Wuchereria bancrofti* **606b**.
Aelurostrongylus abstrusus in cat, life-history **122a**, **162h**, **321c**.
Africa, human helminthiasis **537a**.
—, onchocerciasis **643a**.
—, trematodes **4d**.
Agamonema immanis n. sp. in fish **163a**.
— *vomitor* n. sp. in fish **163a**.
Agfa n. g. for *Leptodera* & *Leptoderes* **55h**.
Ajaja ajaja, *Capillaria* n. sp. in **268a**.
Alcedo atthis, *Proalaria* n. sp. in **294c**.
Alces americana, *Elaphostrongylus* in **551**.
Algeria, schistosomiasis 12a.
Alligator mississippiensis, *Odhneriotrema incommodum* in **36f**.
Allodiplostomum scolopacis n. g., n. sp. in bird **383a**.
Alloglossidium to Plagiorchidae **390f**.
— *corti*, life-history **390f**.
America, Onchocerca **588b**.
—, schistosomiasis **394a**.
Amia calva, *Macroderoides typicus* in **390f**.
Amidostomum in goose in Germany 727.
Amoebotaenia oligorchis n. sp. in bird **383b**.
Amphibia, 2nd intermediaries for *Spiroxys contortus* **456b**.
Amphibia, nematodes in **36d**, **383g**.
—, *Pleurogenes claviger* in **366a**.
Amphicaecum to *Contracaecum* **359a**.
— *parvum* n. sp. in fish **163a**.
Amphimerus filiformis n. sp. in duck **119a**.
Amphistomiasis in cattle in India **378b**.
Amphistomum cervi, cutaneous diagnosis **102a**.
Anaemia, ancylostomiasis **36r**.
—, Diphyllobothrium 121b, 541a.
—, helminthic **593a**.
—, —, in man **126k**.
—, hookworm **297a**, **312za**, **342c**, 548a, 550a, 587a, 587b.
—, pernicious, & *Diphyllobothrium latum* **319a**.
Anchitrema sanguineum in bats **292d**.
Anchitreminae n. subf. **292i**.
Ancylostoma, see also Hookworm.
— spp., hexylresorcinol **423b**.
— *caninum*, chemistry of bursal rays **97c**.
— —, control with calcium cyanamide **346b**.
— — in dog, control **49c**.
— — — —, immunity **82b**.
— — — —, prenatal infection **133w**.
— — — mouse, immunity 390m.
— *duodenale*, dispersal **306a**.
— — in man 97e.
Ancylostomiasis, control in Turkey 216a.
—, diagnosis **89a**.
— in dog, haematology **36r**.
— — man 29a, 126i, 223a, 252a, 256b, 304a, 367a, 384b, 415a, 417b, 437a, 545a, 565a.
— — —, control 143d.
— — — in E. Africa 112a.
— — — — Hungary **327**.
— — — — Italy 5a.
— — — — Kenya 230a.
— — — — Paraguay 95b.
— — — — U.S.A. 45a, **91a**.
— — Nyasaland, bionomics **25a**.
—, pathology & treatment 197b.
— in South India 377a.
Anguilla anguilla, *Goezia* larvae in **321b**.
Anguillicola globiceps n. g., n. sp. in fish **383f**.
Anguillicolidae n. fam. **383f**.
Anguillulina sp. symbiotic with *Fergusonia* sp. in *Eucalyptus* spp. **149a**.
— *aberrans* n. sp. in *Atriplex confertifolia* in U.S.A. **244a**.
— *agrostis*, new hosts **158b**.
— *bradys* in yam, bionomics **127m**.
— *dipsaci* in bulbous iris **93c**, **158d**.
— — — bulbs, control **61b**.

Anguillulina dipsaci disease in *Hydrangea Hortensia* 168a.
— — — — oats 62a.
— — in *Galtonia candicans* 158g.
— —, immune hosts 158c.
— — in narcissus 93d, 158d.
— —, new hosts 158b, 424b.
— — in onion 39a.
— — — potato, bionomics 127d.
— *gallica* n. sp. in elm 55b.
— *pratensis* in narcissus 93d.
— —, new hosts 158b.
— *tritici* in wheat 39a.
— — — — in U.S.A. 285b.
Anguina, valid name for *Anguillulina* 55h.
Animals, domestic, helminthiasis in 6a, 184b, 245a.
—, —, helminths in 184f, 236a, 242b, 298a, 315a, 315b, 449a, 472a, 527a, 625a.
—, —, hydatid in 176a, 582b.
—, —, parasites in 46b.
—, —, Strongyloides in 181b.
—, fascioliasis in 328.
—, fur-bearing, helminths in 227a.
—, helminths in 611a.
—, hydatid in 418b.
—, marine, cestodes in 630a.
—, wild, helminths in 580c.
—, — & domestic, helminths in 494f.
Anisakis similis disease in sea-lion 555a.
Anolis carolinensis, *Megacustis* n. g., n. sp. in 36i.
Anomotaenia to *Choanotaenia* 503a.
— *nycticoracis* n. sp. in bird 383b.
Anonchotaenia sbesteriometra n. sp. in *Motacilla cinerea* 59b.
Anopheles hyrcanus, intermediary for *Microfilaria malayi* 312b.
Anoplocephaliasis in horse 648a.
Anoplocephalidae, life-history experiments 447c.
Anoplocephalinae in rabbits 390m.
Anthelmintics & deglutition in sheep 600a, 600b.
— — dielectric polarisation 335a.
—, Acriflavine 126f.
—, alkylhydroxybenzenes 255a, 255b, 255c, 255d, 255e.
—, antimony compounds 11a, 30a, 100b, 138c, 162f, 265a, 312s, 607a.
—, Arecolin hydrobromide 211b.
—, aromatic hydrocarbon 24a.
—, arsenic trisulphide 117a.
—, arsenious sulphide 31a.
—, " Arsenosolvin " with tartar emetic 454d.
—, carbon disulphide 685e.
—, — tetrachloride 32a, 32b, 33b, 99b, 126a, 140a, 140b, 152a, 288a, 567a.
—, carpain hydrochloride 665a.
—, " Causyth " 176c.
—, chenopodium oil 144a, 152a, 689a.
Anthelmintics, chloroform 100a, 105c.
—, copper arsenate, calcium hydroxide & copper tartrate 600a.
—, copper sulphate 99b, 526a.
—, — — with nicotine sulphate 39b, 247a.
—, *Digenea simplex* 312zb.
—, Dn. 7 138b.
—, Emetine 489a, 588a, 641a.
—, — hydrochloride 143a, 496a, 641g.
—, Fouadin 126f, 162d, 208b.
—, — concentrated 312f, 404d.
—, garlic oil 33b.
—, gentian violet 535b.
—, — — & tartar emetic 197a.
—, gold compounds 11b.
—, 6-hexyl-metacresol 3b.
—, hexylresorcinol 49a, 423b, 668a.
—, iodine 66a, 512b.
—, " Nemural " 348a.
—, nicotine sulphate 99b, 175a.
—, — — & copper sulphate 247a.
—, *Opuntia* sp. 136a.
—, organic gold compounds 71a.
—, ortho-heptylphenol 3b.
—, " Oxyaskarin " 408a.
—, plants 226a.
—, *Quisqualia indica* seeds 453a.
—, santonin 684b.
—, silver salvarsan 585a.
—, sodium arsenite 99a, 99b.
—, tartar emetic 126f.
—, — — & gentian violet 197a.
—, " Telepathine " 204a.
—, tetrachlorethylene 99a, 152a, 684k.
—, *Vangueria edulis* decoction 95a.
—, various, efficacy of 421a.
—, —, for horse 378c.
—, —, — man 429b.
—, —, — sheep 330a.
—, *Xanthoxylum schiniifolia* 312zb.
Anthocephalus to *Dasyrhynchus* & *Gymnorhynchus* 359c.
Anthostrongylus somalilensis in camel in E. Africa 531c.
Antilope cervicapra, *Trichuris* n. sp. in 182a.
Ants, intermediaries for *Raillietina* spp. 390m.
Apatemon parvitestis n. sp. in duck 119a.
Apharyngostrigea flexilis redescribed 647b.
— *ibis* n. sp. in *Ardeola ibis*, life-history 187b.
Aphelenchoides disease in chrysanthemum in New Zealand 418a.
— sp. & bacteria in fern 22c.
— *fragariae* in chrysanthemum 93b, 158d.
— —, new hosts 158b.
— —, 4 strains, hot-water treatment 160t.
— *hodsoni* n. sp. in narcissus 127 l.

Aphelenchoides hunti n. sp. in tiger lily & tomatillo **160u.**
— *ribes* in black currant **39a.**
— *solani* n. sp. **160u.**
Aphelenchulus reversus n. sp. in *Dendroctonus monticolae* **120b.**
Aphodius obscurus, intermediary [?] for *Cittotaenia marmotae* **653b.**
Aploparaksis kamayuta n. sp. in *Capella stenura* **421b.**
Apodemus spp., *Paranematospira* n. g., n. sp. in **721.**
Apomotis cyanellus, *Catoptroides* n. sp. in **133e.**
Apophallus eccentricus n. sp. in dog **284b.**
Appendicitis & cestode infection 44a.
—, helminthic **453b.**
—, —, in man 299a.
Aramides cayanea, *Capillaria* n. sp. in **268a.**
Ardea melanocephala, *Clinostomum* n. sp. in **280b.**
Ardeola ibis, *Apharyngostrigea* n. sp. in 187b.
Arhythmacanthidae n. fam. **383d.**
Arhythmacanthus fusiformis n. g., n. sp. **383d.**
Arhythmorhynchus duocinctus n. sp. in fish **163a.**
Arion rufus, intermediary for *Brachylaemus* sp. **4a.**
Armenia, human helminthiasis **484a, 484b.**
Artamus fuscus, *Eumegacetes* n. spp. in **292i.**
Arthrocephalus maxillaris redescribed **631a.**
Ascariasis 145b.
— & avitaminosis-A in dog 390m.
— — epilepsy in man **269a.**
— in fox, control **228b.**
— — —, haematology **19b.**
— — horse 684d.
—, intestinal perforation 413a.
— in man 65b, 69b, 100d, 104a, 132b, 142a, 147b, 147c, 219a, 220b, 225a, 282b, 291d, 300a, 308a, 313a, 324a, 381a, 397b, 397c, 422a, 428a, 452a, 467a, 488b, 524b, 546a, 546b, 546c, 579b, 601a, 641c.
— — —, diagnosis 40d.
— — —, epidemiology 390m.
— — — in Germany **43a.**
— — pig, economics **370a.**
—, ultra-violet control 672a.
Ascarid nutrition 390m.
— ova, bionomics **133 l.**
Ascaridia cuculina n. sp. in cuckoo **485b.**
— *japalurae* n. sp. in reptile **383h.**
— *lineata* in fowl, carbon tetrachloride 288a.
— — — —, immunity **133h, 457a.**
Ascaridia lineata in fowl, relative immunity of breeds **120a.**
— — — — & turkey, relative immunity **133g.**
Ascarids in dog **646a.**
Ascaris anaphylaxis in man **193b.**
—, anthelmintics **3b.**
—, coelomic fluid, reviewed **312 l.**
— larvae, nutrition **720.**
— in man **170b.**
— — —, chenopodium oil **144a.**
— — —, *Quisqualia indica* seeds **453a.**
— ova, bionomics **673f.**
— —, disinfectants **404c.**
— —, hatching **133o.**
— as pollution index **312zc.**
— *lumbricoides*, alkylhydroxybenzenes **255a, 255b, 255c, 255d, 255e.**
— —, bionomics **673c.**
— — extracts, action on fibroblasts **80a.**
— —, haematophagous **447c.**
— —, intradermal reaction **162a.**
— — in man & pig, identity **455a, 462c.**
— — & meningitis in man **4b.**
— —, " Oxyaskarin " **408a.**
— —, respiration **694a.**
— —, " Telepathine " **204a.**
— *osculata* in *Phoca vitulina* 153a.
— *penita* to *Spiroxys constrictus* **390h.**
— *suilla*, respiration **616a.**
— *sulcata* to *Spiroxys constrictus* **390h.**
— *vitulorum* valid **510a.**
Ascocotyle, key to spp. **292a.**
— (*Phagicola*) *intermedius* n. sp. in *Haliaeetus leucoryphus* **292a.**
— *tenuicollis* n. sp. in *Botaurus lentiginosus* **160b.**
Ashworthius martinagliai n. sp. in *Boselaphus tragocamelus* **280a.**
Aspidogastrid n. sp. 390m.
Aspidogastridae, key to genera **294b.**
Assiminea lutea, 1st intermediary for *Paragonimus* **578b.**
Astacus pallipes, intermediary for *Orchipedum isostoma* **4f.**
Atactorhynchus verecundus n. g., n. sp. in fish **163a.**
Ataenius cognatus, intermediary for *Hymenolepis cantaniana* **139b.**
Atalostrophium (*Atalosparganum*) n. subg. **383e.**
— (*Maccallozoum*) n. subg. **383e.**
Atractis cruciata valid **641j**
Atriplex confertifolia, nematodes in **244a.**
Aulonocephalus lindquisti n. g., n. sp. in *Callipepla squamata* **68f.**
Australia, *Capillaria* **350a.**
—, domestic animal helminths **298a.**
—, human liver-fluke **263a.**
—, hydatidosis **209a.**
—, sheep helminths **99c.**
Australorbis, 4 spp., intermediaries for *Schistosoma mansoni* **394a.**

Avitaminosis-A, dog ascariasis 390m.
Avitellina sandgroundi n. sp. in *Hippotragus equinus* 92a.

Bacteria & *Aphelenchus* sp. in fern **22c.**
— — *Tylenchus scandens* in wheat **294a.**
Bacterial invasion & *Graphidium strigosum* **155a.**
Baerietta baeri n. g., n. sp. **647a.**
Baltic, marine nematodes **528a.**
Bat, *Anchitrema sanguineum* in **292d.**
—, *Dicrocoelium lasiuri* in **55q.**
—, *Lecithodendrium* n. spp. in **292h.**
—, *Litomosa americana* in **55q.**
—, *Paralecithodendrium* n. spp. in 390m.
—, *Strongylacantha* n. sp. in **383j.**
Beet, *Heterodera schachtii* in **2a.**
Belgian Congo, free-living nematodes **60a.**
Bertiella in animals in Philippines 156a.
— *studeri* in man 341a.
Biological control, *Popillia japonica* **251a.**
Bionomics, *Ancylostoma duodenale* **306a.**
—, ancylostomiasis **25a.**
—, *Anguillulina bradys* **127m.**
—, — *dipsaci* **127d.**
—, ascarid ova **133 l.**
—, Ascaris ova **133o, 673f.**
—, — *lumbricoides* **673c.**
—, *Bothriocephalus scorpii* ova **514c.**
—, *Catenotaenia pusilla* **189c.**
—, cysticerci **211a.**
—, Cysticercus **72a.**
—, — *bovis* **78, 318b, 726.**
—, *Diphyllobothrium latum* **724.**
—, *Dirofilaria immitis* **84b, 394b.**
—, *Dracunculus medinensis* **27a.**
—, *Fasciola hepatica* **14b.**
—, gordiids **21a.**
—, helminths **477a.**
—, *Heterodera schachtii* **388c, 536a.**
—, hookworm **84a, 118c, 243a, 312k.**
—, — larvae 669b.
—, horse strongyles **435a.**
—, hydatid **511a.**
—, *Loa loa* 18b, **373a.**
—, marine nematodes **189d.**
—, *Microfilaria bancrofti* 180a, **180c.**
—, — *immitis* **180b.**
—, — *malayi* 262a.
—, microfilariae **18d.**
—, Moniezia **82a.**
—, — *expansa* **331a.**
—, nematode ova **457c.**
—, *Oxyuris vermicularis* **188c.**
—, *Rhabditis filiformis* **614a.**
—, schistosome intermediaries **193a.**
—, schistosomes 390m.
—, sheep nematodes **270a.**
—, — trichostrongyles **672b.**
—, strongyle eggs **55i.**
Bionomics, *Taenia saginata* **466a.**
—, Trichinella **1a**, 49b, **133y, 175b.**
—, — larvae **622c.**
—, Trichostrongyle larvae **127e, 127f, 155e, 627a.**
—, Trichostrongyles **133b.**
—, Trichuris ova **673f.**
—, *Wuchereria bancrofti* **107b, 180e.**
Bird, *Echinochasmus* n. spp. in **615b.**
Birds, *Brachylaemus* sp. in **4a.**
—, *Capillaria* spp. in 268a.
—, cestodes in **24b, 59b, 383b.** 518a.
—, game, helminths in **127h.**
—, helminths in **150a.**
—, *Heterakis gallinae* & " Blackhead " in **490b.**
—, microfilariae in **615a.**
—, nematodes in **383i.**
—, parasites in 390m.
—, trematodes in **119a, 383a.**
—, wild, *Syngamus trachea* in **386a.**
Bithynia tentaculata, intermediary for *Cyathocotyle* n. sp. **108a.**
— —, 1st intermediary for *Pleurogenes claviger* **366a.**
" Blackhead " & Heterakis in birds **490b.**
— in turkey **131a.**
Blarina brevicauda, Hymenolepis n. sp. in **178j.**
— —, *Panopistus pricei* in **52a.**
Blatttella germanica, intermediary for *Gongylonema ingluvicola* **55p.**
Blattidae, Severianoia n. sp. in **631b.**
Bolbocephalodes nom. nov. for *Bolbocephalus* **544c.**
Bolbocephalodidae nom. nov. **544c.**
Bolbocephalus to *Bolbocephalodes* nom. nov. **544c.**
Bolbosoma thunni n. sp. in *Thunnus thynnus* 590a.
Bonasa umbellus, Hymenolepis microps in 160q.
— —, microfilaria in **106a.**
Boselaphus tragocamelus, Ashworthius n. sp. in **280a.**
— —, helminths in **280a.**
Botaurus lentiginosus, Ascocotyle n. sp. in **160b.**
Bothridium plerocercoid in *Hydromys chrysogaster* **340a.**
— *pythonis* 506a.
— — var. *minor* 1928 **525b.**
Bothriocephalus scorpii ova, development **514c.**
— — in *Rhombus maximus*, life-history **514a.**
Brachylaemus reviewed **4c.**
— sp. in birds, life-history **4a.**
— *virginiana* in opossum, life-history **178b.**
Brain, human, helminths in 107d.
Brazil, domestic animal helminths **527a.**
—, fish cestodes **155f, 617a.**

Brazil, fish nematodes **494e**.
—, oxyuroids **494a**.
—, schistosomiasis 301a.
—, — mansoni 507a, 507b.
—, *Stichorchis giganteus* **494d**.
—, *Syngamus laryngeus* **494b**.
Brevibucca saprophaga n. g., n. sp. **388d**.
Britain, musk-rat helminths **90a**.
British Guiana, filariasis 69d.
Bubulcus coromandus, *Pegosomum* n. sp. in **608b**.
Bucephalus mytili n. sp. in *Mytilus edulis* **155g**.
Buffalo, stephanofilariasis in **595a**.
—, verminous dermatitis in **272a**.
Bufo crucifer, 2nd intermediary for *Clinostomum heluans* **22b**.
— *vulgaris*, *Lepoderma ramlianum* in **390e**.
Bulbodacnitis scotti n. sp. in *Salmo lewisi* **697b**.
Bulbs, *Anguillulina dipsaci* in **61b**.
Bulinus contortus, 1st intermediary for *Lepoderma ramlianum* **390e**.
— *forskali*, intermediary for *Schistosoma haematobium* 92b.
Butorides virescens, *Tetrameres* n. sp. in **641f**.

Caïman latirostris, *Crocodilicola* n. sp. in **343a**.
Calcium cyanamide controlling *Heterodera schachtii* **388b**.
— — — hookworms **346a**, **358a**.
" Calcutta sore " in cattle **28a**.
Callipepla squamata, *Aulonocephalus* n. g., n. sp. in **68f**.
Callotetrarhynchus to *Floriceps* **214a**.
Calotes calotes, *Paradistomum* n. sp. in **608b**.
— *versicolor*, *Physaloptera* n. sp. in **292f**.
Caluromys philander, *Rictularia* n. sp. in **409b**.
— —, *Subulura* n. sp. in **409b**.
Camacolaimus prytherchi n. sp. 55f.
Camallanus pipientis n. sp. in *Rana pipiens* **36d**.
Camel, *Anthostrongylus somalilensis* in **531c**.
—, helminths in **485a**.
—, *Stilesia vittata* in **26d**.
Campeloma dicisum, *Cercariaeum* n. sp. in **361**.
Campula folium n. sp. in *Neophocaena phocaenoides* **568a**.
Campydorinae n. subf. **160s**.
Canada, *Cysticercus talpae* **155d**.
—, *Diphyllobothrium latum* **103a**.
—, *Fascioloides magna* **19a**.
—, *Heterodera schachtii* **93a**, 158a.
—, lungworms **30c**.
—, *Taenia tenuicollis* **155d**.
—, *Triaenophorus* spp. **133s**.
Canary Islands, parasites 635a.
Cancer & Cysticercus in rat 235b.
— — Gongylonema **645a**.
— — — *neoplasticum* **37a**.
— — rat helminths **338a**.
— — schistosomiasis 34b.
— — trichinelliasis 671a.
Cancroma cochlearia, *Capillaria* n. sp. in **268a**.
Canines, Crenosoma in 688d.
—, Eucoleus in 688d.
—, nematodes in **684k**.
Capella stenura, *Aploparaksis* n. sp. in **421b**.
Capillaria in cattle in Australia **350a**.
— spp. in birds **268a**.
— *aerophila* redescribed **178e**.
— — & *Trichuris vulpis*, eggs differentiated **87g**.
— *annulata* in pheasant in U.S.A. **36h**.
— *auretae* redescribed **166a**.
— *avellari* n. sp. in *Mycteria mycteria* **268a**.
— *brevicollis* to *C. brachyauchenia* nom. nov. **133zb**.
— — n. sp. in *Triturus viridescens* **36d**.
— *cairinae* n. sp. in fowl 633c.
— *carioca* n. sp. in *Sphaeroides testudineus* **268c**.
— *confusa* n. sp. in *Aramides cayanea* **268a**.
— *eberthi* n. sp. in *Metachirops opossum* **476a**.
— *hepatica* in man in Panama **390b**.
— *inequalis* n. sp. in *Triturus viridescens* **36d**.
— *linsi* n. sp. in *Galictis vittata* **640d**.
— *longicauda* n. sp. in *Metachirops opossum* **476a**.
— *okapi* n. sp. in okapi **432b**.
— *penidoi* n. sp. in *Nothura maculosa* **268a**.
— *pereirai* n. sp. in Molossidae **640d**.
— *uropapillata* n. sp. in *Phasianus colchicus* **268a**.
— *vanelli* n. sp. in bird **383i**.
— *venteli* n. sp. in *Cancroma cochlearia* & *Ajaja ajaja* **268a**.
Capillostrongyloides minimum n. comb. **628c**.
— *zederi* n. g., n. sp. in *Hoplias malabaricus* **268c**.
Caretta caretta, *Hapalotrema* n. sp. in **133u**.
— —, *Pyelosomum* n. sp. in **133u**.
Caridinicola indica in *Xiphocaridina compressa* 506e.
Carnivora, helminths in 594a.
—, *Orchipedum isostoma* in **4f**.
Caryophyllaeus japonensis to *Khawia* **647a**.
Cat, *Aelurostrongylus abstrusus* in **122a**, **162h**, **321c**.
—, concentrated Fouadin **404d**,

Cat, *Diphyllobothrium* n. sp. in **46n.**
—, *Diplopylidium* n. sp. in **87h.**
—, helminths in 684h.
—, heterophyid in **399a.**
—, parasites in 58b.
—, *Taenia taeniaeformis* in **312m.**
—, *Toxocara cati* in **133v.**
Catatropis indicus n. sp. in fowl **292b.**
Catenotaenia pusilla, contraction waves **189c.**
Caterpillar, *Rhabditis coarctata* in **33d.**
Catfish, *Maculifer* n. sp. in 160d.
Catoptroides, list of spp. **133e.**
— to *Phyllodistomum* **178a.**
— *lohrenzi* n. sp. in *Apomotis cyanellus* **133e.**
Cattle, amphistomiasis in **378b.**
—, " Calcutta sore " in **28a.**
—, Capillaria in **350a.**
—, coenuriasis in 580a.
—, *Coenurus cerebralis* in **580b.**
—, Cysticercus in 72e, 72h, 111b, 111c.
—, *Eurytrema pancreaticum* in **176b, 235c.**
—, *Fascioloides magna* in **597b,** 598a.
—, filarial nodules in **74b.**
—, helminths in **578a.**
—, hydatid in **72f.**
—, lungworm disease in 460b.
—, lungworms in **184c,** 184e.
—, *Mecistocirrus digitatus* in **160j.**
—, *Moniezia benedeni* in **160j.**
—, nasal granuloma in **311a.**
—, *Onchocerca gutturosa* in **460d.**
—, *Paramphistomum* n. sp. in **378a.**
—, *Schistosoma nasalis* in **240a.**
—, *Setaria haemorrhagica* in **4a.**
—, — *labiato-papillosa* in **160j.**
—, Setariine in **378a.**
—, *Trichostrongylus longispicularis* in 160p.
Celery, *Anguillulina dipsaci* in **424b.**
Celestus pleii, *Mesocoelium* n. sp. in 55s.
Centropus sinensis, *Pseudoporrorchis* n. g., n. sp. in **480a.**
Centrorhynchus elongatus n. sp. **383d.**
Cepaea hortensis, intermediary for *Crenosoma vulpis* **172a.**
Cephalobus & disease in peanut 425a.
—*cubaënsis* n. sp. **160u.**
Cercaria in *Melania tuberculata* **32d.**
—, 8 n. spp. **133r.**
—, 6 n. spp. in *Turritella communis* **155b.**
— sp. in mussel **155g.**
— *buccini* 617b.
— *dubia* in *Physa fontinalis* **514b.**
— *ephemera*, excretory system **155c.**
— *flexicorpa* n. sp. in *Helisoma trivolvis* **36b.**
— *imbricata* to *Notocotylus imbricata* **76a.**
— *infracaudata* to *Macravestibulum obtusicaudum* **160g.**
Cercaria kentuckiensis n. sp. 390m.
— *macrocerca* in *Pisidium obtusale* **487a.**
— *spinifera* in Turbellaria **468b.**
Cercariae killed by normal sera **448b.**
— in molluscs in China 42d.
— — —, double infections 390m.
— — *Mus norvegicus* & shrew **42c.**
Cercariaeum constantiae n. sp. in *Campeloma dicisum* **36 1.**
— *lintoni*, life-history 390m.
Cerchorchis patonianus n. sp. in *Dermophis mexicanus* **475a.**
Cercocebus sp., *Oesophagostomum bifurcum* in **87b.**
— *singularis* n. sp. in *Pseudemys elegans* **36i.**
Cestode disease 716.
— — in fowl, iodine **666a.**
— infection & appendicitis 44a.
— larvae, artificial evagination 686a.
Cestodes in birds, control **24b.**
— — —, in Indo-China **59b.**
— — —, interrelationships **518a.**
— — — in Japan **383b.**
— — China, check-list **647a.**
—, cytology & organogenesis **178i.**
— in dog 184d.
— — —, " Nemural " **348a.**
— — fish in Brazil **617a.**
— — mammals & snakes in Japan **383c.**
— — man, anthelmintics 100a, 100c, 100e.
— — marine animals **630a.**
—, serological tests **73a.**
—, n. spp. in siluroid fish in Brazil **155f.**
Ceylon, filariasis **40a.**
Chamaeleon multituberculata, *Strongyluris* n. sp. in **571a.**
Chandlerella striatus to *Folleyelides* n. g. **85b.**
Chelonia imbricata, *Diaschistorchis pandus* in 641h.
Chemistry, *Ancylostoma caninum* **97c.**
—, *Ascaris lumbricoides* **80a.**
—, hydatid fluid **22e.**
—, *Taenia saginata* **15a.**
Chimpanzee, oxyuriasis in 291c.
China, cattle helminths **578a.**
—, cercariae 42d.
—, clonorchiasis **363b.**
—, *Cysticercus cellulosae* **107a.**
—, *Filaria* spp. **363a.**
—, goat helminths 658a.
—, helminthiasis 42e.
—, helminths 107c.
—, human helminths **312zd,** 312v, 312w, 312x, **529a.**
—, — Paragonimus **312c, 312d.**
—, hydatidosis **312i.**
—, *Microfilaria malayi* **312b.**
—, Paragonimus **42b, 107e.**
—, parasitology **312z.**
—, pig & man helminths **312r.**
—, poultry trematodes **606c.**

China, *Tylenchulus semipenetrans* **141a.**
Choanotaenia manipurensis n. sp. in snipe **326a.**
— *passerina* in *Passer domesticus* **133zd.**
— *sinensis* n. sp. in *Psarisomius dalhousiae* **59b.**
Chordodes echinatus to *Chordodiolus* n. g. **189b.**
— *joyeuxi* n. sp. 525a.
Chordodidae reclassified **321a.**
Chordodinae n. subf. **321a.**
Chordodiolinae n. subf. **321a.**
Chordodiolus n. g., for *Chordodes echinatus* **189b.**
Chrysanthemum, *Aphelenchoides* in **418a.**
—,— *fragariae* in **93b, 158d.**
Cirenaica, human helminthiasis 549a.
Citrus spp., *Tylenchulus semipenetrans* in **141a.**
Cittotaenia marmotae, life-history **653b.**
— *variabilis*, life-history experiments **679a.**
Cladorchis pangasii to *Protocladorchis* n. g. **68a.**
Cladotaenia circi n. sp. in bird **383b.**
Clarias batrachus, *Procamallanus* n. sp. in **294d.**
Clavinema parasiluri n. g., n. sp. in fish **383f.**
Clemmys japonicus, *Polystomoides* n. spp. in **568b.**
Clinostomum, progenetic metacercaria 160h.
— *heluans* in heron, life-history **22b.**
— *marginatum* cercariae 390i.
— — — in fishes 390m.
— — miracidium 133d.
— *van der horsti* n. sp., in *Ardea melanocephala*, life-history **280b.**
Cloacitrema ovatum n. g., n. sp., in bird **383a.**
Clonorchiasis in man 695a.
— — —, bibliography **312g.**
— — — in China **363b.**
— & sugar metabolism **51a.**
Clonorchis in man in Cuba **502b, 591e,** 641d.
— *sinensis* cercaria redescribed **464a.**
— — — in man, epidemiology 569b.
— — — —, gold compounds 11b.
— — — rabbit, metabolism **154b, 154c**
Clupea ilisha, *Clupenurus* n. g., n. sp. in **321e.**
— —, *Lecithaster* n. spp. in **292e.**
— —, *Orientophorus* n. g., n. spp. in **155j.**
Clupenurus piscicola n. g., n. sp. in *Clupea ilisha* **321e.**
Cochlearius cochlearius, *Contracaecum* n. sp. in **475b.**
Coenuriasis 717.
— in cattle 580a.
— — sheep 28b.
Coenuriasis in *Theropithecus gelada* 512a.
Coenurus n. sp. in hare in Japan **669a.**
— *cerebralis* in cattle in Denmark **580b.**
Coffee, nematode disease in **486a.**
—, nematodes in **217a.**
Collyriclum faba in crow **160i.**
Colonies, French, helminthiasis **336a.**
Contracaecum collieri n. sp. in fish **163a.**
— *gracile* n. sp. in fish **383f.**
— *histiophori* n. sp. in fish **383f.**
— *hoffmanni* n. sp. in *Cochlearius* **475b.**
— *milvi* n. sp. in bird **383i.**
— *pagrosomi* n. sp. in fish **383f.**
— *robustum* n. sp. in fish **163a.**
— *torquatum* n. sp. in bird **383i.**
Control, *Ancylostoma caninum* **49c, 346b.**
—, ancylostomiasis 216a.
—, *Anguillulina dipsaci* **61b.**
—, ascariasis 672a.
—, Ascaris ova **404c.**
—, cestodes **24b.**
—, coffee nematodes **217a.**
—, *Cysticercus cellulosae* **38a.**
—, domestic animal helminths **6a, 472a.**
—, *Epibdella melleni* 390m.
—, *Fascioloides magna* **177a, 435a.**
—, fox ascariasis **228b.**
—, fur-animal helminths **227a.**
—, *Heterodera marioni* **54b, 54c, 58c, 94a, 113a, 114a, 190,** 530a, **581b,** ~~**581c.**~~
—, — *schachtii* **35a, 123a, 160s, 388a, 388b, 581c.**
—, hookworm **118d,** 143d, **358a.**
—, horse helminths **322a.**
—, — nematodes **393a.**
—, human helminthiasis **567b.**
—, hydatid 101a.
—, oxyuriasis **53a.**
—, parasites 46b.
—, plant nematodes **146a, 281a.**
—, *Schistosoma* 173a.
—, — *haematobium* 97b, **394c.**
—, schistosomiasis 505a.
—, sheep helminths **114b.**
—, — nematodes **151a.**
—, — parasites **435a.**
—, *Strongyloides* **181b.**
—, — *stercoralis* **453c.**
—, trichinelliasis 248a.
—, trichonemiasis **649a.**
Cooperia fieldingi to *C. punctata* 160 l.
— *okapi* n. sp. in okapi **432b.**
— *onchophora* parasitized by *Giardia* sp. **36q.**
— *serrata* to *Paracooperia* n. g. **640e.**
Corvus spp., helminth ova in **66a.**
Corynosoma ambispinigerum n. sp. in *Phoca* sp. **590a.**

Cosmocephalus capellae n. sp. in bird **383i.**
Costa Rica, *Mecistocirrus digitatus* **160j.**
— —, *Moniezia benedeni* **160j.**
— —, *Setaria labiato-papillosa* **160j.**
Cotton, free-living nematodes in **424a.**
—, *Heterodera marioni* in **113a.**
Cotugnia taiwanensis n. sp. in bird **383b.**
Coturnix japonica, Raillietina n. sp. in **59b.**
Cotylophoron cotylophorum, life-history 390m.
— *okapi* n. sp. in okapi **432b.**
Cotylurus hebraicus redescribed **647b.**
— *syrius* redescribed **647b.**
Creeping eruption in man, treatment **451a.**
Crenosoma in canines 688d.
— *skrjabini* n. sp. in *Sorex araneus* **36k.**
— *vulpis* in fox, life-history **172a, 369a.**
Crocidura cyerulea, Strongyloides n. sp. in **615e.**
— *mimula, Paraplagiorchis* n. sp. in **721.**
— *russula, Hymenolepis pistillum* in **365a.**
— —, *Pseudhymenolepis* n. g., n. sp. in **224b.**
Crocodilicola redefined **59a.**
— spp. redescribed **59a.**
— *caïmancola* n. sp. in *Caïman latirostris* **343a.**
Crocodilus cataphractus, Neodiplostoma sp. in **343a.**
Crow, *Collyriclum faba* in **160i.**
—, *Thelazia* n. sp. in **187a.**
Crustacea, nematodes in **160r.**
Ctenocephalides felis, spirurid larvae in **133n.**
Ctenopsyllus musculi, intermediary for *Hymenolepis diminuta* **543a.**
Cuba, human clonorchis **502b, 591e,** 641d.
—, — fascioliasis 502a.
—, — helminths 502c, 502d, 535a, 535c, 636a, 636b, 639a, 639b, 641i, 641l, 685a, 685b.
—, Platyhelmia **591b, 591d.**
Cuckoo, *Ascaridia* n. sp. in **485b.**
Cuculidae, helminths in **485b.**
Cucullanellus pleuronectidis n. sp. in fish **383f.**
Cucullanus filiformis n. sp. in fish **383f.**
— *robustus* n. sp. in fish **383f.**
Culex spp., intermediaries for *Wuchereria bancrofti* **42a, 107b, 312a, 606a.**
Currant, black, *Aphelenchoides ribes* in **39a.**
Cyathocotyle fusa in duck **382b.**
— *gravieri* n. sp., life-history **108a.**
— *teganuma* n. sp. in grebe **119a.**
Cyathocotylidae reclassified **268b.**
Cyclamen, *Heterodera marioni* in **94a.**
Cyclocoelum allahabadi n. sp. in *Tringa erythropus* **292c.**
— *capellum* n. sp. in *Capella gallinago* **292c.**
— *erythropis* n. sp. in *Tringa erythropus* **292c.**
— *indicum* n. sp. in *Glottis nebularia* **292c.**
— *lobatum* n. sp. in *Glottis nebularia* **292c.**
— *mehrii* n. sp. in *Capella gallinago* **292c.**
— *nebularium* n. sp. in *Glottis nebularia* **292c.**
— *sharadi* n. sp. in *Urocissa favirostris* **26f.**
— *straightum* n. sp. in *Glottis nebularia* **292c.**
Cyclops spp., intermediaries for *Dracunculus* **358e.**
— —, — — *Procamallanus* n. sp. **36m.**
— —, 1st intermediaries for *Spiroxys contortus* **456b.**
— —, 2nd intermediaries for *Halipegus occidualis* **473a.**
Cylicodontophorus ultrajectinus, infective larva **390g.**
Cylicostomiasis tetracantha in mule **18f.**
Cylindrogaster curzii n. sp. **33e.**
Cypselus apus, Plagiorchis maculosus disease in **653b.**
Cyrnea excisiformis n. sp. in bird **383i.**
— *graphophasiani* n. sp. in bird **383i.**
Cysticerci in meat, refrigeration **186b, 211a.**
— — —, regulations **186a.**
Cysticerciasis **715.**
—, cerebral, in man 333a, 354b, **354c, 371a, 411a,** 461c, 622b.
—, —, precipitin test **323a.**
— in man 241a, 258a, 392a, 398b, 404f, 446a, 664a.
—, ocular 206b, **691a.**
—, —, in man 337a, 483a.
—, pulmonary, in man 434a.
— in roe deer **454a.**
— bovis 531b.
— cellulosae in man 38b, 205a, 253a.
Cysticercoid in *Nomadacris septemfasciata* **421c.**
Cysticercoides medidiae n. sp. in fish **163a.**
Cysticercus & cancer in rat 235b.
— in cattle **72e, 72h.**
— — —, meat inspection 111b, 111c.
— — meat inspection, historical 111a.
— & meat refrigeration **72a.**
—, viability test **72b.**
— *bovis*, bionomics **318b.**
— — in frozen meat **726.**
— — — liver **165a.**
— —, location 531a.
— — & meat refrigeration **78.**
— *cellulosae*, control **38a.**

Cysticercus cellulosae disease in man 85a.
— — in liver 165a.
— — — man 135a, 135b.
— — — — in China 107a.
— *fasciolaris*, culture *in vitro* 390 1.
— — in rat, immunity 3a, 3e.
— *pisiformis*, abnormalities 684 1.
— — in rabbit, immunity 82d.
— *talpae* in *Ondatra zibethica* in Canada 155d.
Cystidicola farionis egg shell 196b.
— *walkeri* n. sp. in *Oncorhynchus kisutch* 75c.
Czechoslovakia, animal helminths 611a.

Dactylostomum gracilis n. g., n. sp. in fish 155h.
Dactylogyrus macracanthus in tench 542a.
Dasymetra nicolli n. sp. in *Natrix sipedon* 178h.
— *villicaeca* n. sp. in reptile, life-history 178g.
Dasypostrongylus filamentosus n. g., n. sp. 640e.
Deer, *Elaeophora* n. sp. in 189a.
—, *Fascioloides magna* in 177a.
—, *Nematodirella longispiculata*, 4 n. sub-spp. in 55n.
—, *Onchocerca* n. sp. in 189a.
—, roe, cysticerciasis in 454a.
Deglutition & anthelmintics in sheep 600a, 600b.
Deletrocephalus redefined 624b.
Delicata cameroni n. sp. 640e.
— *delicata* n. g., n. sp. 640e.
— *similis* n. sp. 640e.
— *uncinata* n. sp. 640e.
— *variabilis* n. sp. 640e.
Delphis delphis, *Prosthecocotyla* n. spp. in 630a.
Deltokeras delachauxi n. sp. 647a.
Dendroctonus monticolae, new nematodes in 120b.
Denmark, cat heterophyid 399a.
—, *Coenurus cerebralis* 580b.
—, plant nematodes 309a.
—, Trichinella 307a.
—, wild animal helminths 580c.
Dermatemys mawii, *Schizamphistomoides* n. sp. in 178c.
Dermatitis, verminous, in buffalo 272a.
Dermophis mexicanus, *Cerchorchis* n. sp. in 475a.
Desmoscolex aquadulcis n. sp. 77e.
Diagnosis, *Dirofilaria immitis* 385c.
—, domestic animal helminths 625a.
—, Fasciola 641e.
—, helminthiasis 637a.
Diaschistorchis pandus in *Chelonia imbricata* 641h.
Dibothriocephalus, see *Diphyllobothrium*.
Dibulbiger longispiculis n. g., n. sp. in *Rana montezumae* 85b.
Dicheilonematinae n. subf. 160n.
Dichelyne diplocaecum n. sp. in fish 163a.
— *fastigatus* n. sp. in fish 163a.
Dicotyles torquatus, *Taxorchis schistocotyle* in 390a.
Dicrocoelium, see also liver-fluke.
— *dendriticum*, life-history experiment 447c.
— — in Norway 48a.
— *lasiuri* in bat 55q.
Dictyocaulus in ruminants, treatment with iodine 512b.
—*khawi* n. sp. in pig 187a.
Didymocylindrus filiformis n. g., n. sp. 383e.
Didymocystis bilobata n. sp. 383e.
— *crassa* n. sp. 383e.
— *ovata* n. sp. 383e.
— *semiglobularis* n. sp. 383e.
— *simplex* n. sp. 383e.
— *soleiformis* n. sp. 383e.
Didymoproblema fusiforme n. g., n. sp. 383e.
Didymozooidae reclassified 383e.
Didymozooinae n. subf. 383e.
Didymozoum filicolle n. sp. 383e.
— *longicolle* n. sp. 383e.
Dilepis capellae n. sp. in bird 383b.
— *delachauxi* to *Paradilepis macracantha* nom. nov. 525b.
— *lebasquei* n. sp. in *Francolinus pintadeanus* 59b.
— *scolecina* to *Paradilepis*, 647a.
— — — — *delachauxi* n. comb. 525b.
— *turdi* n. sp. in bird 383b.
— *undula* redescribed 295b.
Dioctophyme renale in dog 385d.
Diodon holacanthus, *Heterolebes* n. g., n. sp. in 614b.
— —, *Opistholebes* n. sp. in 614b.
Diorchis nyrocae n. sp. in bird 383b.
Diorchotrema sp. ova in heart of man 134a.
Dipetalonematidae n. fam. 160n.
Dipetalonematinae n. subf. 160n.
Diphtherophora perplexans 55d.
Diphtherophoridae n. fam. 160s.
Diphyllobothrium anaemia 541a.
— sp., abnormalities 36s.
— — in U.S.A. 390m.
— *cordiceps* uninfective to man 133zc.
— *fuhrmanni* n. sp. 647a.
— *laruei* to *D. latum* 160a.
— *latum* anaemia 121b.
— — in Canada, monographed 103a.
— — — dog, immunity 312m.
— — inhibited by *Taenia serrata* in dog 465a.
— —, 2nd intermediaries in Russia 87i.
— — larvae in fish in Russia 404i.
— —, longevity 724.
— — in man in Philippines 284c.

Diphyllobothrium latum & Pernicious Anaemia **319a.**
— *mansonoides* n. sp. in cat & dog **36n.**
— — to *D. mansoni* **160a.**
— *serpentis* n. sp. in *Naja naja* **383c.**
— *stemmacephalum* in *Phocaena phocaena* **481b.**
Diplopylidium skrjabini n. sp. in cat **87h.**
Diplogonoporus, origin of **36s.**
Diplorchis ranae redescribed **568b.**
Diplostomum vanelli n. sp. in bird **383a.**
Diplotriaena monticolae n. sp. in bird **383i.**
Dirofilaria in dog, treatment **684f, 684j.**
— *immitis*, antimony compound **30a.**
— — in dog, diagnosis **276a, 385c.**
— — — —, Fouadin **162d.**
— — — — in France **18c.**
— — — —, periodicity **84b.**
— —, larval migration **458a.**
— —, periodicity **394b.**
Dirofilariinae n. subf. **160n.**
Discocephalidae nom. nov. for Disculicipitidae **525b.**
Discocephalum nom. nov. for *Disculiceps* 525b.
Disculiceps to *Discocephalum* nom nov. **525b.**
Disculicipitidae to Discocephalidae nom. nov. **525b.**
Dispharynx emberizae n. sp. in bird **383i.**
Distoma isostoma to *Orchipedum* **4f.**
Distomes, lymph vessels 390m.
Distomum incommodum to *Odhneriotrema* **36f.**
— *méhelyi* to *Ophiosacculus* n. g., **390j.**
Dochmius maxillaris to *Arthrocephalus* **631a.**
Dog, *Ancylostoma caninum* in **49c, 82b, 133w.**
—, ancylostomiasis in **36r.**
—, *Apophallus* n. sp. in **284b.**
—, ascariasis & avitaminosis-A in 390m.
—, ascarids in **646a.**
—, cestodes in 184d, **348a, 465a.**
—, *Dioctophyme renale* in 385d.
—, *Diphyllobothrium* n. sp. in **36n.**
—,— *latum* in **312m.**
—, Dirofilaria in **684f, 684j.**
—, — *immitis* in **18c, 30a, 84b, 276a, 385c.**
—, *Echinococcus granulosus* in **126m, 133c.**
—, *Episthochasmus* n. g., n. sp. in **615b.**
—, *Filaria immitis* in 174a.
—, helminthiasis in 688b.
—, helminths in **211b, 342a,** 390m, 684a, **688c.**
—, *Heterophyes* n. sp. in **284a.**
—, hexylresorcinol **423b.**
—, hookworm in **3d.**
—, *Monorchotrema* n. sp. in **284b.**
Dog, *Oncicola canis* in **385a.**
—, *Oslerus osleri* in **70a.**
—, *Paragonimus* in **26c.**
—, parasites in 58b.
—, Schistosomiasis suis (?) in **26a.**
—, *Spirocerca sanguinolenta* in **462b.**
—, *Stictodora* n. sp. in **284a.**
—, *Strongyloides stercoralis* in **207a.**
—, trichuriasis in 276b.
—, *Trichuris* in **385b, 534b, 684i.**
Dorylaimoidea reclassified **160s.**
Dracontiasis in India, epidemiology **358e.**
— — man 442a.
Dracunculus, intradermal test **69a.**
— in man 105b, 118a.
— *medinensis* larvae, bionomics **27a.**
Dragonflies, 2nd intermediaries for *Alloglossidium corti* **390f.**
Drymobius bifossatus, *Oswaldocruzia* n. sp. in **409a.**
Duck, *Amphimerus* n. sp. in **119a.**
—, *Apatemon* n. sp. in **119a.**
—, *Cyathocotyle fusa* in **382b.**
—, *Echinostoma* spp. in **561c, 606c.**
—, *Metorchis orientalis* in **382b.**
—, *Notocotylus urbanensis* in **390p.**
—, *Paramonostomum* n. sp. in **606c.**
—, *Prosthogonimus* n. sp. in **606c.**
—, *Psilochasmus* n. sp. in **199a.**
Dutch East Indies, animal helminths **150a.**
Dytiscus, 2nd intermediary for *Pleurogenes claviger* **366a.**

East Africa, *Anthostrongylus somalilensis* **531c.**
— —, hookworm 112a.
— —, *Schistostoma haematobium* **346d.**
Echinocephalus larva in sea urchin 133za.
Echinochasmus bagulai n. sp. in bird **615b.**
— *ruficapensis* n. sp. in bird **615b.**
— — — — — grebe **119a.**
Echinococcus larva, see under Hydatid.
Echinococcus granulosus in dog, Casoni test **133c.**
— — — —, immunity **126m.**
Echinoparyphium brevicauda n. sp. in grebe **119a.**
Echinorhynchus, 4 spp. to *Pseudoporrorchis* n. g., **480a.**
— *cotti* n. sp. **383d.**
— *truttae* larvae in *Gammarus pulex* 75a.
Echinostoma spp. in duck, life-history **561c.**
— *charadrii* n. sp. in *Pluvialis fulvus* **608b.**
— *coalitum*, life-history **160e.**
— *corvi* n. sp. in bird **383a.**
— *elongata* n. sp. in duck **606c.**
— *macrorchis* in rat, life-history **382a.**
— *minor* n. sp. in fowl **606c.**
— *robustum* n. sp. in bird **383a.**

Echinuria cincli n. sp. in bird **383i**.
Ecology, onchocerciasis **448a**.
Ectenurus lemeriensis n. sp. in *Scomberoides* sp. **608b**.
Edentata, trichostrongyles in **640e**.
Egypt, Filaria 126j.
—, hookworm 390m.
—, Schistosoma **126b**, 126h.
—, schistosomiasis 505a.
—, splenomegaly 138d.
Elaeophora schneideri n. sp. in sheep & deer in U.S.A. **189a**.
Elaphostrongylus, ocular, in *Alces americana* **551**.
Elapomorphus tricolor, *Macdonaldius* n. sp. in **68g**.
Elephant, African, helminths in **650c**.
—, —, *Syngamus* n. sp. in **650c**.
—, Indian, helminths in **26e**.
—, —, *Pfenderius* n. sp. in **26e**.
Elephantiasis in man in S. Africa 40c.
Elm, *Anguillulina* n. sp. in **55b**.
Enterobiasis 709.
— in man 644a.
Enterobius, see also Oxyuris.
— & appendicitis in man 638a.
— in man, treatment **574a**.
— *lemuris* n. sp. in *Lemur albifrons* **59c**.
— *muris* ♂ n. sp. in mouse **383j**.
Eosinophilia & helminthiasis 404e.
— in rat 195a.
— & Taeniasis saginata 23a.
—, Trichinella **155i**.
Epibdella melleni in fish, control 390m.
— — — *Trachinotus carolinus*, immunity 390m.
Epidemiology, animal hydatid **582b**.
—, ascariasis 390m.
—, *Clonorchis sinensis* 569b.
—, dracontiasis **358e**.
—, *Fasciola hepatica* **447a**.
—, hookworm 390m.
—, human hookworm **608c**.
—, — hydatid **582a**.
—, *Moniezia expansa* 390m.
—, Schistosoma **126b**, 126h.
Episthochasmus caninum n. g., n. sp. in dog **615b**.
Erilepturus tiegsi n. g., n. sp. in fish **155h**.
Eritrea, helminths **50a**.
—, Schistiosomiasis mansoni 471b.
Eryx johnii, *Strongyloides stercoralis* n. var. in **615e**.
Eucalyptus spp., *Anguillulina* sp. & *Fergusonia* sp. in **149a**.
Euclinostomum multicaecum n. sp. in *Ophicephalus striatus* **608b**.
Eucoleus in canines 688d.
— to *Capillaria* **166a**.
Eufilaria lari n. sp. in bird **383i**.
Eumegacetes, key to spp. **292i**.
— *artamii* n. sp. in *Artamus fuscus* **292i**.
— *braunii* n. sp. in *Artamus fuscus* **292i**.
Eumegacetinae n. subf. **292i**.
Europe, hare helminths **703**.
Euryhelmis squamula in *Rana esculenta*, life-history **224a**.
Eurytemora hirundo, 1st intermediary for *Bothriocephalus scorpii* **514a**.
Eurytrema fastosum variations **527b**.
— *pancreaticum* in cattle, pathology **235c**.
— — disease in cattle **176b**.
Eustomos chelydrae in turtle, life-history **36e**.
Eutamias striatus, *Rictularia* n. sp. in 178f.
— —, *Spirura* n. sp. in 178f.
Exorchis major n. sp., life-history 154e.
Exotidendriinae n. subf. **292i**.
Exotidendrium gharialii n. g., n. sp. in *Gavialis gangeticus* **292i**.

Falcon, *Thelazia* n. sp. in **187a**.
Fasciola, see also liver-fluke.
— in man, diagnosis 641e.
— — —, Emetine hydrochloride 641g.
— *hepatica*, cutaneous diagnosis **102a**.
— —, Emetine hydrochloride 496a.
— — in horse **653a**.
— — — — in Turkey **349a**.
— —, life-history in Philippines **608a**.
— — in man, diagnosis 347a.
— — — —, Emetine 588a, 641a.
— — — —, — hydrochloride **143a**.
— —, mode of infection **14b**.
— — in Norway, incidence **325a**.
— — — rabbit, immunity **133ze**.
— — — sheep, immunological tests **73b**.
— — — Switzerland, epidemiology **447a**.
— —, technique for studying 641k.
Fascioliasis 67a.
— in animals, text-book **328**.
— — man in Cuba 502a.
— — —, Emetine **489a**.
— hepatica 250a.
— — in man 98a.
— — in Turkey 249a.
Fasciloides magna in cattle 598a.
— —, control **435a**.
— — in deer, pathology & control **177a**.
— —, life-history in Canada **19a**.
— — in rabbit, cattle & sheep **597b**.
Fasciolopsiasis in man 312h, 569a.
Fergusonia sp. & *Anguillulina* sp., symbiosis **149a**.
Fern, *Aphelenchus* sp. in **22c**.
Filaria, ocular, in horse **314a**.
— spp. in China, intermediaries **363a**.
— *bancrofti*, bionomics reviewed **180e**.
— —, experimental infection in *Culex fatigans* **42a**.
— —, — — — mosquitoes **36c**.
— *immitis* in dog in Formosa 174a.
— *pertenue* to *Protofilaria* n. g. **650a**.

Filarial nodules in cattle in Shanghai **74b**.
Filariasis 47a, 712.
— in man 40b, 273a, **312ze**, 416a, 416b, 523a.
— — — in British Guiana 69d.
— — — — Egypt 126j.
— — — — — Haiti 619a.
— — — — Puerto Rico **433a**.
— — —, treatment **687a**.
—, ocular, in man 25b, 521a, 538a.
—, —, — — in Ceylon **40a**.
—, organic gold compounds **71a**.
— bancrofti 202a.
— — in man 312j, 357a, 458b, 458c, **576a**.
—haemorrhagica in horse **561b**.
Filariid in fowl in Formosa 556a.
— — opossum, implanted **221a**.
Filariids in monkeys in Panama 390m.
Filarioidea reclassified **160n**.
Filariopsis arator redescribed **259a**.
Fischoederius elongatus & *F. siamensis* distinct **390k**.
Fish, cestodes in **617a**.
—, *Dactylostomum* n. g., n. sp. in **155h**.
—, *Diphyllobothrium latum* in **404i**.
—, *Epibdella melleni* in 390m.
—, *Erilepturus* n. g., n. sp. in **155h**.
—, fresh-water, 2nd intermediaries for *Clinostomum heluans* **22b**.
—, —, — — — *Metagonimus* n. sp. **396a**.
—, *Haplorchis* 4 n. spp. in **292g**.
—, *Helicometra* n. spp. in **155h**.
—, 2nd intermediaries for *Diphyllobothrium latum* **87i**.
—, marine, helminths in **360a**.
—, —, trematodes in 390m.
—, *Monticellia* n. sp. in **617a**.
—, *Myzophorus* n. spp. in **617a**.
—, 20 new helminths in **163a**.
—, *Nomimoscolex* n. sp. in **617a**.
—, *Parahemiurus* n. sp. in **155h**.
—, *Probolitrema* n. spp. in **155h**.
—, siluroid, new cestodes in **155f**.
Fishes, Acanthocephala in **624a**.
—, *Clinostomum marginatum* in 390m.
—, helminths in 506f, **681a**.
—, 2nd intermediaries for *Spiroxys contortus* **456b**.
—, nematodes in **383f**, **494e**.
—, *Spirorhynchus* n.g., n. sp. in **590a**.
Floriceps to *Dasyrhynchus* & *Gymnorhynchus* **359c**.
— *saccatus* in *Mola mola* **214a**.
Fly, house, transmitting helminth ova **673g**.
Foleyellides striatus n.g. in *Rana montezumae* **85b**.
Formosa, *Filaria immitis* 174a.
—, fowl filariid 556a.
—, *Hymenolepis nana* 174b.
—, *Raillietina madagascariensis* **174c**.
Fossaria parva, intermediary for *Fascioloides magna* **19a**.
Fowl, *Ascaridia lineata* in **120a**, **133g**, **133h**, **288a**, **457a**.
—, *Capillaria* n. sp. in 633c.
—, *Catatropis* n. sp. in **292b**.
—, cestode disease in **666a**.
—, *Echinostoma* n. sp. in **606c**.
—, filariid in 556a.
—, helminths in **175a**, **610a**.
—, Physaloptera in 358b.
—, prosthogonimiasis in **660a**.
—, *Raillietina* spp. in 390m.
—, *Syngamus trachea* in **33a**, **184a**.
Fox, ascariasis in **19b**, **228b**.
—, *Crenosoma vulpis* in **172a**, **369a**.
—, helminthiasis in **169a**.
—, lungworms in **30c**.
—, silver, anthelmintics **24a**.
France, *Dirofilaria immitis* **18c**.
—, human helminthiasis 723.
—, rat helminths **142b**.
Francolinus pintadeanus, *Dilepis* n. sp. in **59b**.
— —, *Hymenolepis* n. sp. in **59b**.
Frit-fly, *Tylenchinema oscinellae* in **9a**.
Fruit trees, *Heterodera marioni* in **293a**.
Fuhrmannella to *Moniezia* **90b**.
Funambulus pennanti, *Latibuccana* n. g., n. sp. in **164a**.
Fungi, predacious on nematodes **148a**.

Galea leucoblephara, *Graphidioides* n. sp. in **640b**.
Galictis vittata, *Capillaria* n. sp. in **640d**.
Galtonia candicans, *Anguillulina dipsaci* in **158g**.
Gammarus pulex, *Echinorhynchus truttae* larvae in 75a.
Garrulax chinensis, *Raillietina* n. sp. in **59b**.
Gavialis gangeticus, *Exotidendrium* n. g., n. sp. in **292i**.
Gazelle, *Moniezia expansa* in **278a**.
Gecarcinus lateralis, *Trypylium carcinicolum* n. var. in **160r**.
Germany, Amidostomum **727**.
—, ascariasis **43a**.
—, human helminthiasis **652a**.
—, — helminths 310a.
—, plant nematodes **146a**.
—, public health regulations 72c.
—, trichinella inspection 352a.
Giardia sp. in *Cooperia onchophora* **36q**.
Gidhaia to *Taufikia* **499a**.
Glaphyrostomum mcintoshi n. sp. 160f.
Glomeris spp., intermediaries for *Hymenolepis pistillum* **365a**.
Glossocercus cyprinodontis n. sp. in fish **163a**.

Gnathonemus macrolepidotus, 2nd intermediary for *Clinostomum* n. sp. **280b.**
Gnathostoma disease in man in Siam 95c.
— *spinigerum* in Japanese mink **312q.**
Goat, helminthiasis in **551a.**
—, helminths in **414a**, 658a.
—, *Stilesia vittata* in **26d.**
—, strongyloidiasis in **611a.**
Gobius minutus, helminths in **514d.**
— —, 2nd intermediary for *Bothriocephalus scorpii* **514a.**
Goezeella spp. to *Monticella* **155f.**
Goezia larvae disease in *Anguilla anguilla* **321b.**
— spp. reviewed **359b.**
— *minuta* n. sp. in fish **163a.**
Gonapodasmiinae n. subf. **383e.**
Gonapodasmius okushimai n. sp. **383e.**
Gongylonema & cancer in mouse **645a.**
— spp. in *Odocoileus virginianus* in U.S.A. **160k.**
— *ingluvicola* in *Oreortyx picta*, life-history **55p.**
— *neoplasticum* & cancer in rat **37a.**
— *pulchrum* in man **121c.**
— — — — in Panama **390b.**
Goniobasis livescens, intermediary for *Macravestibulum obtusicaudum* **160g.**
— *nigrina*, *Metagonimoides* sp. in **68c.**
Goose, Amidostomum in **727.**
Gordiids, larval encystment **21a.**
—, taxonomy **189b.**
Gorgodera amplicava in *Rana* spp., life-history **603a.**
Graphidioides mazzai n. sp. in *Galea leucoblephara* **640b.**
Graphidium strigosum & bacterial invasion **155a.**
Great Britain, *Microfilaria volvulus* **398a.**
— —, plant parasitic nematodes **704.**
Grebe, *Cyathocotyle* n. sp. in **119a.**
—, *Echinochasmus* n. sp. in **119a.**
—, *Echinoparyphium* n. sp. in **119a.**
—, *Petasiger* n. sp. in **119a.**
Greece, helminthiasis 390 o.
—, human helminths **470a.**
Guinea-fowl, helminths in **50a.**
Gymnodactylus caspus, 2nd intermediary for *Diplopylidium* n. sp. **87h.**
Gymnorhynchus (*Molicola*) *horridus* n. subg. **359c.**
Gyrabascus brevigastrus n. g., n. sp. in *Myotis lucifugus* **390j.**
Gyrodactyloidea in N. America 390m.

Habronemiasis in horse, general account **444a.**
Hadjelia curvata n. sp. in *Nothura maculosa* **68g.**
Haematology, ancylostomiasis **36r.**
—, ascariasis **19b.**
Haemonchus reviewed **145a.**
— *contortus*, anthelmintics **99a**, **99b.**
— —, efficacy of anthelmintics **421a.**
Haiti, human filariasis 619a.
Haliaeetus leucoryphus, *Ascocotyle* n. sp. in **292a.**
Halipegus occidualis in *Rana clamitans*, life-history **473a.**
Hapalotrema synorchis n. sp. in *Caretta caretta* **133u.**
Haploparaxis clerci n. sp. in bird **383b.**
— *japonensis* n. sp. in bird **383b.**
— *scolopacis* n. sp. in bird **383b.**
Haplorchis attenuatum n. sp. in fish **292g.**
— *gangeticum* n. sp. in fish **292g.**
— *piscicola* n. sp. in fish **292g.**
— *silundii* n. sp. in fish **292g.**
Hare, *Coenurus* n. sp. in **669a.**
—, helminths in **703.**
—, *Longistriata* n. sp. in **383j.**
Harmostomum syrmatici n. sp. in bird **383a.**
Hawaii, liver-fluke 621a.
Heart of man, heterophyid ova in **134a.**
Hedgehog, *Trichuris* n. sp. in **200a.**
Hedruris bryttosi n. sp. in fish **383f.**
Helicometra bassensis n. sp. in fish **155h.**
— *tenuifolia* n. sp. in fish **155h.**
Heliconema anguillae n. sp. in fish **383f.**
Heligmostrongylus hassalli to *Longistriata* **41b.**
Helisoma spp., 1st intermediaries for *Macroderoides typicus* **390f.**
— *antrosa*, 1st intermediary for *Halipegus occidualis* **473a.**
— —, 2nd intermediary for *Gorgodera amplicava* **603a.**
— *campanulata*, 1st intermediary for *Alloglossidium corti* **390f.**
— *trivolvis*, *Cercaria* n. sp. in **36b.**
Helminth extracts depressing blood pressure **404b.**
— ova, concentration techniques **32c.**
— — in *Corvus* spp. **66a.**
— — — faeces 208a.
— — transmitted by house flies **673g.**
— — — — vegetables **673d.**
— physiology, reviewed **157a.**
Helminthiasis & appendicitis in man **687b.**
— carried by insects **623a.**
—, diagnosis **161a.**
—, — with duodenal sound 637a.
— in dog 688b.
— — domestic animals **184b**, 245a.
— — — —, control **6a.**
— & eosinophilia 404e.
— in fox **169a.**
—, hepatic, & C.N.S. **490a.**
— in horse 70c, **272b.**

Helminthiasis in man 147a, 290b, 358d, 401a, 404g, 439a, 450a, 461b, 539a, 547a, 563a, 564a, 605a, 605b.
— — —, control **567b.**
— — — in Africa **537a.**
— — — — Armenia **484a, 484b.**
— — — — China 42e.
— — — — Cirenaica 549a.
— — — — Cuba 502c, 502d.
— — — — France 723
— — — — French colonies **336a.**
— — —, geography 194a.
— — — in Germany **652a.**
— — — — Greece 390 o.
— — — — Indo-China 220a.
— — — — Japan 567c.
— — — — Nigeria **317a.**
— — — — Russia 673a, **673b.**
— — —, treatment 203a.
—, ocular, in man 517a.
— in Philippines 628a.
— — pig 70d.
— — pigeon **649b.**
— — — in Yugoslavia 573a.
— & " pining " in sheep **560a.**
— in poultry **179a, 699.**
— & rickets in sheep **513a.**
— in ruminants, iron therapy **460a.**
— — sheep 183a.
— — — in India 682a.
— — — & goat in India **551a.**
—, treatment 242a.
— in tuberculous patients 110a.
Helminthic acidosis 641b.
— anaemia in man **126k.**
— — — — & blood glutathione **593a.**
— immunity reviewed **242c, 242d, 404a.**
Helminthological technique 719.
Helminthology 707.
—, historical 180d.
Helminths & anaemia in man **126k.**
— in African elephant **650c.**
— — animals 177b.
— — — in Czechoslovakia **611a.**
— & appendicitis in man **453b.**
— in *Boselaphus tragocamelus* **280a.**
— — brain of man 107d.
— — camel **485a.**
— & cancer in rat **338a.**
— in Carnivora, check-list 594a.
— — cat 684h.
— — cattle in China **578a.**
— — Cuculidae in Russia **485b.**
— & diarrhoea in man **429a.**
— in dog 390m, 684a.
— — —, Arecolin hydrobromide **211b.**
— — — in Poland **688c.**
— — — — Russia **342a.**
— — domestic animals 184f.
— — — — in Australia **298a.**
— — — — — Brazil **527a.**
— — — —, control **472a.**
— — — —, diagnosis **625a.**
Helminths in domestic animals in Hong Kong **236a.**
— — — — — India, text-book **449a.**
— — — —, treatment **242b,** 315a, 315b.
— — fishes 506f.
— — — in Yugoslavia **681a.**
— — fowl, nicotine sulphate **175a.**
— — —, treatment **610a.**
— — fur-bearing animals, control **227a.**
— — game birds **127h.**
— — goat in China 658a.
— — *Gobius minutus* **514d.**
— — guinea-fowl in Eritrea **50a.**
— — hare in Europe **703.**
— — horse, control **322a.**
— — — in Puerto Rico **519a.**
—, immunity 708.
— in Indian elephant **26e.**
— — mammals & birds in Dutch East Indies **150a.**
— — man 97a, **130b,** 132a, 143c, 238a, 289a, 491a, 592a.
— — — in China 107c, 312v, 312w, 312x, **312zd, 529a.**
— — — — Cuba 535a, 535c, 636a, 636b, 639a, 639b, 641i, 641l, 685a, 685b.
— — — — Germany 310a.
— — — — Greece, incidence **470a.**
— — — — Java **115a.**
— — — — Mexico 638b.
— — —, mixed infections **312u.**
— — — in Shanghai **312 o.**
— — —, treatment 260a.
— — — in U.S.A. **36p.**
— — marine fish **360a.**
— — musk-rat in Britain **90a.**
— — *Natrix sipedon* **599a.**
— — okapi **432a, 432b.**
— — partridge **127h.**
— — perch, pathology **133t.**
— — pig 4g, 81a.
— — — & man in China **312r.**
— — poultry 184g.
— — rat in France **142b.**
— — reindeer in Norway **419a.**
— — sheep, anthelmintics **136a.**
— — —, control **114b.**
— — —, copper sulphate **526a.**
— — — & goat in Turkey **414a.**
— — —, & husbandry **672c.**
— — — in W. Australia **99c.**
—, tropisms **477a.**
— in wild animals in Denmark **580c.**
— from wild to domestic animals **494f.**
— in wolf **581a.**
Hemidactylus flavoviridis, Thelandros n. sp. in **56a.**
— —, *Thubunaea asymmetrica* in **56a.**
Hemiurus communis in Acartia 562a.
Heron, *Clinostomum heluans* in **22b.**
Herpestes urva, Pulmostrongylus n. g., n. sp. in **187a.**

Herpobdella atomaria, 2nd intermediary for *Cercaria dubia* **514b**.
Heterakiasis in poultry **531d**.
Heterakis & "Blackhead" in turkey **131a**.
— *gallinae* & "Blackhead" in birds **490b**.
Heterocheilidae, development 690a.
Heterodera marioni, chemical treatment **54c**.
— — control **58c**.
— — — by cultivation **114a**.
— — in cotton, control **113a**.
— — — cyclamen, control **94a**.
— — — fruit trees, varietal immunity **293a**.
— — — herbaceous plants **425b**.
— —, new hosts **158b**, **158e**.
— — ova in man in U.S.A. **34a**.
— — in pineapple, varietal immunity **128a**.
— — — plants, control **190**.
— — — Russia, control **581b**, **581c**.
— —, soil sterilization **54b**.
— — in sugar beet, sugar yield **552a**.
— — — tobacco in U.S.A. **285a**, **425c**.
— — — tomato, histology **54a**.
— — — tuberose, hot-water treatment **160v**.
— — — U.S.A., control 530a.
— *schachtii* in *Atriplex confertifolia* in U.S.A. **284a**.
— — — beet **2a**.
— —, control **160s**.
— —, — with calcium cyanamide **388b**.
— —, — — chemicals **388a**.
— —, disease in oats **656a**.
— — — — pea **61a**.
— — — — potato **127c**, **137a**.
— — & microcysts **127a**.
— — in mustard, bionomics **536a**.
— — — oats in Canada **93a**, **158a**.
— — — —, incidence **127g**.
— — — pea, control **123a**.
— — — potato **39a**.
— — — —, control **35a**.
— — — rape, bionomics **536a**.
— — — Russia, control **581c**.
— — — sugar-beet **127i**.
— —, thermal death point **388c**.
— — in turnip-rape, bionomics **536a**.
Heterolebes maculosus n. g., n. sp. in *Diodon holacanthus* **614b**.
Heterophyes sp. ova in heart of man **134a**.
— *brevicaeca* n. sp. in man **284a**.
— *expectans* n. sp. in dog **284a**.
Heterophyid in cat in Denmark **399a**.
— ova in human heart **391a**.
Heterophyidae in Philippines **284a**, **284b**.
— reviewed **430a**.
Heterosentis plotosi n. sp. **383d**.
Heth, key to species **55g**.
Heth dimorphum n. sp. in *Spirostreptus* sp. **55g**.
— *hexaspinosum* n. sp. in *Spirobolus* sp. **55g**.
Heydonius n. g. for fossil mermithids **55e**.
Hindia n. g. for *Notocotylus gibbus* **615d**.
— *lucknowensis* n. sp. in *Mareca penelope* **615d**.
Hippotragus equinus, *Avitellina* n. sp. in 92a.
Hirundo rustica, *Plagiorchis maculosus* in 75b.
Histiostrongylus spinosus to *Spinostrongylus* n. g. **476b**.
Homoscaphis to *Odhneriotrema* **22a**, **633b**.
Hong Kong, domestic animal helminths **236a**.
Hookworm, see also Ancylostoma, Necator.
Hookworm anaemia in man **342c**, 548a, 587a, 587b.
— — — —, treatment 550a.
— — & nutrition **312za**.
— —, treatment **297a**.
— control, bore-hole latrine **118d**.
—, — with calcium cyanamide **358a**.
— in dog on deficient diet **3d**.
— — Egypt, epidemiology 390m.
—, immunological specificity 669b.
— in India, bionomics **118c**.
— — Japan, bionomics **243a**.
— larvae, tropisms 669b.
— in man, bionomics **84a**.
— — —, carbon tetrachloride 140a, 140b.
— — —, chloroform **105c**.
— — — in Manchuria **312t**.
— — — — Philippines **608c**.
— — —, treatment 118b, **261a**.
— — —, viability **312k**.
Hookworms in sheep in South Africa **232a**.
Hoplias malabaricus, *Capillostrongyloides* n. g., n. sp. in **268c**.
Hoplolaimus bradys to *Anguillulina* **127m**.
Horse, anoplocephaliasis in **648a**.
—, ascariasis in 684d.
—, *Fasciola hepatica* in **349a**, **653a**.
—, Filariasis haemorrhagica in **561b**.
—, habronemiasis in **444a**.
—, helminthiasis in 70c, **272b**.
—, helminths in **322a**, **519a**.
—, hydatid in 72g, **653a**.
—, nematodes in **393a**.
—, ocular Filaria in **314a**.
—, *Onchocerca cervicalis* in **534a**.
—, Onchocerciasis cervicalis in **460d**.
—, strongyle larvae in **725**.
—, strongyles in **228a**, **435a**, **706**.
—, strongylosis in **454c**, **454d**.
—, trichonemiasis in **649a**.

Horse, Trichoneminae in **688a**.
—, various anthelmintics **378c**.
Host-list, trematodes in gastropods **87a**.
Host-parasite reactions **659a**, **661a**.
Hot-water treatment, *Aphelenchoides fragariae* **160t**.
— —, *Heterodera marioni* **160v**.
Howardula phyllotretae in *Phyllotreta* spp. **127k**.
" Hump sore " in cattle **378a**.
Hungary, ancylostomiasis **327**.
Hydatid in animals 418b.
—, control 101a.
— in domestic animals **176a**.
— — — —, epidemiology **582b**.
— fluid, chemistry **22e**.
—, formalin 275a.
— in horse 72g, **653a**.
—, immunological tests **296b**, **479a**, **618b**.
— in man 57a, 63a, 64a, 159a, 167a, 170a, 171a.
— — —, epidemiology 582a.
—, massive infection in ox **72f**.
— in mouse & rabbit **109a**.
— — Palestine, incidence **342b**.
— scolices, culture *in vitro* **22d**.
— —, evagination **511a**.
— in sheep, immunity **126m**.
— sterilization 109b.
Hydatidosis 46a, 596a, 700, 705.
— in Australia & New Zealand **209a**.
— — brain 198a.
— — liver 287a.
— — lung 213a, 229a.
— — man 17a, 17b, 18a, 185a, 191a, 201a, 231a, 231b, 233a, 234a, 266a, **273b**, 290a, 291a, 291b, 296a, 302a, 303a, 305a, 329a, 334a, 345a, 355a, 364a, 374a, 375a, 379a, 379b, 397a, 402a, 405a, 406a, 406b, 407a, 410a, 412a, 420a, 429c, 436a, 438a, 440a, 441a, 445a, 461a, 474a, 474b, 474c, 488c, 488d, 491b, 493a, 498a, 501b, 504a, 504b, 509a, 515a, 515b, 515c, 524a, 524c, 532a, 554a, 558a, 575b, 586a, 604a, 605c, 612a, 620a, 632a, 632b, 634a, 642a, 642b, 642c, 651a, 657a, 657c, 662a, 662b, 677a, 677b, 677c, 693a.
— — — in China **312i**.
—, osseous, in man 351a, 353a.
— in pig 618a.
— — rabbit 30b.
— reviewed 354a.
— in spleen 212a, 215a.
—, spurious, in man 478a.
— surveyed 584a.
Hydrangea Hortensia, Anguillulina dipsaci in **168a**.
Hydromys chrysogaster, Bothridium plerocercoid in **340a**.
Hyla versicolor, Polystoma integerrimum n. subsp. in 390m.
Hymenolepiasis nana in man **579a**.
Hymenolepis anthocephalus n. sp. in *Blarina brevicauda* **178j**.
— *bilharzii*, redescribed **421b**.
— *cantaniana* in poultry, life-history **139b**.
— *charadrii* n. sp. in bird **383b**.
— *diminuta*, life-history **543a**.
— *francolini* n. sp. in *Francolinus pintadeanus* **59b**.
— *fraterna*, abnormal hosts 133x.
— — cysticercoids in mouse **360**.
— *globirostris* redescribed **421b**.
— *japonica* n. sp. in bird **383b**.
— *microps* in *Bonasa umbellus* 160q.
— *nana* in man 65a.
— — — — in Formosa 174b.
— — — — — U.S.A. 390m.
— — — mouse, life-history & immunity **193c**.
— — — rat, age immunity **484c**.
— *nyrocae* n. sp in bird **383b**.
— *peipingensis* n. sp. **647a**.
— *pistillum* in *Crocidura russula*, life-history **365a**.
— *streptopeliae* n. sp. in *Streptopelia orientalis* **59b**.
— *taiwanensis* n. sp. in bird **383b**.
— *tonkinensis* n. sp. in *Surniculus lugubris* **59b**.
Hypoderaeum sinensis n. sp. in poultry **606c**.

Ichthyofilaria dasycotti n. g., n. sp. in fish **383f**.
Icterotaenia to *Choanotaenia* **503a**.
— *delachauxi* var. *mesacanta* n. var. **503a**.
Ierestrongylus filiformis n. g., n. sp. in *Mazama simplicicornis* **361a**.
Iheringascaris iheringascaris n. g., n. sp. **494e**.
Immunity, *Ancylostoma caninum* **82b**, 390m.
—, *Ascaridia lineata* **120a**, **133g**, **133h**, **457a**.
—, *Cysticercus fasciolaris* **3a**, **3e**.
—, — *pisiformis* **82d**.
—, *Diphyllobothrium latum* **312m**.
—, *Echinococcus granulosus* **126m**.
—, *Epibdella melleni* 390m.
—, *Fasciola hepatica* **133ze**.
—, helminthic **242c**, **242d**.
—, helminths 708.
— to helminths reviewed **404a**.
—, *Heterodera marioni* **128a**, **293a**.
—, hydatid **126m**.
—, *Hymenolepis nana* **193c**, **484c**.
—, nematodes 506d.
—, *Nippostrongylus muris* **82c**, **82e**, **193d**, **193e**.
—, *Taenia taeniaeformis* **312m**.
—, *Toxocara cati* **133v**.
—, Trichinella **3c**, **188a**, 390m, **673e**.

Immunology, *Amphistomum cervi* **102a.**
—, Ascaris **193b.**
—, — *lumbricoides* **162a.**
—, Casoni reaction 410a.
—, cercaricidal sera **448b.**
—, cerebral cysticerciasis **323a.**
—, cestodes **73a.**
—, *Clonorchis sinensis* **154c.**
—, *Dracunculus* **69a.**
—, *Echinococcus granulosus* **133c.**
—, *Fasciola hepatica* **73b, 102a.**
—, hookworm 669b.
—, hydatid **296b, 479a, 618b.**
—, Schistosoma **126g.**
—, — *japonicum* **33f.**
—, Trichinella **72d,** 121a, **155i,** 199a, **465b, 622a.**
Incidence, human helminths **470a.**
India, amphistomiasis **378b.**
—, animal helminths **551a.**
—, bird microfilariae **615a.**
—, cattle Setariine **378a.**
—, domestic animal helminths **449a.**
—, dracontiasis **358e.**
—, fish Acanthocephala **624a.**
—, hookworm **118c.**
—, *Paragonimus* **26c.**
—, *Schistosoma nasalis* **240a.**
—, Schistosomiasis suis (?) **26a.**
—, sheep helminthiasis 682a.
—, south, ancylostomiasis 377a.
—, *Stilesia vittata* **26d.**
—, *Taenia solium* **26b.**
Indo-China, cestodes **59b.**
—, helminthiasis 220a.
Insects carrying helminthiasis **623a.**
Ips spp., ectoparasitic nematodes on **674a.**
Iris, bulbous, *Anguillulina dipsaci* in **93c, 158d.**
Irish Free State, human nematodes **403b.**
Italy, ancylostomiasis 5a.
—, *Wuchereria bancrofti* 549b.

Japan, Acanthocephala **383d.**
—, amphibian nematodes **383g.**
—, bird cestodes **383b.**
—, — nematodes **383i.**
—, — trematodes **119a, 383a.**
—, cestodes **383c.**
—, *Coenurus* n. sp. **669a.**
—, fish nematodes **383f.**
—, hookworm **243a.**
—, human helminthiasis 567c.
—, mammalian nematodes **383j.**
—, Metacercariae **382b.**
—, rat trematodes **382a.**
—, reptilian nematodes **383h.**
—, *Schistosoma japonicum* **257a.**
Java, helminths **115a.**
Joyeuxia to *Joyeuxiella* n. g. **87j.**
Joyeuxiella n. g. for *Joyeuxia* **87j.**

Kalicephalus laticaudae n. sp. in reptile **383h.**
— *natricis* n. sp. in reptile **383h.**
Kenya, ancylostomiasis 230a.
—, onchocerciasis **40e.**
Khawia sinensis n. g., n. sp. **647a.**
Killigrewia oenopopeliae n. sp. in bird **383b.**
— *streptopeliae* n. sp. in bird **383b.**
Kingfisher, *Psilorchis* n. g., n. sp. in **294e.**
Kite, *Notocotylus* n. sp. in **26f.**
Köllikeria (*Köllikerizoum*) n. subg. **383e.**
— (*Wedlia*) n. subg. **383e.**
— — *globosa* n. sp. **383e.**
— — *reniformis* n. sp. **383e.**
Köllikeriinae n. subf. **383e.**

Lapemis hardwickii, Opisthorchis n. sp. in **608b.**
Latibuccana funambulensis n. g., n. sp. in *Funambulus pennanti* **164a.**
Lebouria choerodonis replaced by *L. choerodontis* **87d.**
Lechriorchis, type redescribed 390m.
Lecithaster extralobus n. sp. in *Clupea ilisha* **292e.**
— *indicus* n. sp. in *Clupea ilisha* **292e.**
Lecithochirium microstomum n. sp. in fish **163a.**
Lecithocladium, key to spp. **283a.**
— *longicaudum* n. sp. in *Muraenesox cinereus* **283a.**
Lecithodendriidae reclassified **292i.**
Lecithodendrium, key to spp. **292h.**
— reviewed **613a.**
— *bhaleraoi* n. sp. in bat **292h.**
— *longiforme* var. *allahabadi* n. var. in bat **292h.**
— *loossii* n. sp. in bat **292h.**
— *mehrai* n. sp. in bat **292h.**
Lecithoporus n. g. for *Pycnoporus* spp. **292i.**
Lemur, *Oxyspirura conjunctivialis* in **59c.**
— *albifrons, Enterobius* n. sp. in **59c.**
— *fulvus, Subulura* n. sp. in **59c.**
Leontocebus rosalia, Parlitomosa n. g., n. sp. in **126 l.**
Lepoderma ramlianum in *Bufo vulgaris*, life-history **390e.**
Lepodactylus gracilis, Strongyloides n. sp. in **631b.**
Leptonchidae n. fam. **160s.**
Leptonchinae n. subf. **160s.**
Lesticus magnus, Parachordodes n. sp. in **468a.**
Leucochloridium sporocysts **390c.**
— *sime* n. sp. in bird **383a.**
Leucophoyx thula, Tetrameres n. sp. in **641f.**
Libellula incesta, 3rd intermediary for *Halipegus occidualis* **473a.**

Life-history, *Aelurostrongylus abstrusus* **122a, 162h, 321c.**
—, *Alloglossidium corti* **390f.**
—, Anoplocephalidae **417c.**
—, *Apharyngostrigea* n. sp. 187b.
—, *Bothriocephalus scorpii* **514a.**
—, *Brachylaemus* sp. **4a.**
—, — *virginiana* **178b.**
—, *Cercariaeum lintoni* 390m.
—, *Cittotaenia marmotae* **653b.**
—, — *variabilis* **679a.**
—, *Clinostomum heluans* **22b.**
—, — *van der horsti* n. sp. **280b.**
—, *Cotylophoron cotylophorum* 390m.
—, *Crenosoma vulpis* **172a, 369a.**
—, *Cyathocotyle* n. sp. **108a.**
—, *Dasymetra* n. sp. **178g.**
—, *Dicrocoelium dendriticum* **447c.**
—, *Echinostoma* spp. **561c.**
—, — *coalitum* **160e.**
—, — *macrorchis* **382a.**
—, *Euryhelmis squamula* **224a.**
—, *Eustomos chelydrae* **36e.**
—, *Exorchis* n. sp. 154e.
—, *Fasciola hepatica* **608a.**
—, *Fascioloides magna* **19a.**
—, *Gongylonema ingluvicola* **55p.**
—, *Gorgodera amplicava* **603a.**
—, *Halipegus occidualis* **473a.**
—, Heterocheilidae **690a.**
—, *Hymenolepis cantaniana* **139b.**
—, — *diminuta* **543a.**
—, — *nana* **193c.**
—, — *pistillum* **365a.**
—, *Lepoderma ramlianum* **390e.**
—, *Longistriata musculi* **41c.**
—, lungworms **196a.**
—, *Macravestibulum obtusicaudum* **160g.**
—, *Macroderoides typicus* **390f.**
—, *Metagonimus* n. sp. **396a.**
—, *Mosesia* n. sp. 390m.
—, *Notocotylus imbricata* **76a.**
—, — *urbanensis* **390p.**
—, *Onchocerca gutturosa* **460d.**
—, *Opisthioglyphe ranae* **224a.**
—, *Opisthorchis felineus* **312p.**
—, *Orchipedum isostoma* **4f.**
—, *Oxyuris* 427a.
—, *Panopistus pricei* **52a.**
—, *Paragonimus* **42b, 107e, 312c, 578b.**
—, — *westermanni* 154d, 154f.
—, pig nematodes **667a.**
—, *Pleurogenes claviger* **366a.**
—, *Polystomum integerrimum* **676a.**
—, *Procamallanus* n. sp. **36m.**
—, *Raillietina* spp. 390m.
—, *Renifer aniarum* **178g.**
—, *Schistosoma haematobium* 92b.
—, *Spirocerca sanguinolenta* **162c, 462b.**
—, *Spiroxys contortus* **456b.**
—, *Strongyloides* 390m.
—, *Syngamus trachea* **522a.**
—, *Telorchis robustus* **55t.**
—, *Toxascaris leonina* **55j.**
Life-history, *Trichinella* **457b, 501a.**
—, *Wuchereria bancrofti* **36c, 283b, 283c, 312a, 606a, 606b.**
Limatulum gastroides n. sp. in *Myotis lucifugus* 160c.
Limnaea spp., 2nd intermediaries for *Echinostoma* spp. **561c.**
— —, trematode cercariae in **129a.**
— *philippinensis*, intermediary for *Fasciola hepatica* **608a.**
Linstowia echidnae in *Tachyglossus setosa*, redescribed **7a.**
Liolope copulans in *Megalobatrachus japonicus* **154a.**
Lion, *Paragonimus westermanni* in 246a.
—, sea, *Anisakis similis* disease in **555a.**
Lissemys punctata, *Lissemysia* n. g., n. sp. in **294b.**
Lissemysia indica n. g., n. sp. in *Lissemys punctata* **294b.**
Litomosa, key to species **55q.**
— *americana* in bat **55q.**
Liver-fluke, see also Dicrocoelium, Fasciola.
— disease in sheep **153b.**
— in Hawaii 621a.
— — man in Australia 263a.
— — sheep in Spain **74a, 462a.**
Lizards, Oxyuroids in **494a.**
Loa loa disease in man 86a.
— — longevity 18b, **373a.**
— — in man **344a.**
Lobatozoum multisacculatum n. g., n. sp. **383e.**
Lomaphorus to *Lomasoma* n. g. 133m.
Lomasoma n. g. for *Lomaphorus* 133m.
Longicollum pagrosomi n. g., n. sp. **383d.**
Longidorinae n. subf. **160s.**
Longistriata carolinensis n. sp. in rodents **41b.**
— *dalrymplei* n. sp. in rodents **41b.**
— *leporis* n. sp. in hare **383j.**
— *musculi* in mouse, life-history **41c.**
— — n. sp. in rodents **41b.**
— *noviberiae* n. sp. in rodents **41b.**
Lota vulgaris, Acanthocephala in 390m.
Lung-fluke, see Paragonimus.
Lungworm disease in cattle **184c, 184e, 460b.**
Lungworms in fox in Canada **30c.**
—, life-history **196a.**
— in *Odocoileus virginianus* **55o.**
— — pig 390m.
Lybia, Schistosoma 97d.
Lynx, *Taenia* n. spp. in **431a.**
Lyperosomum colorosum n. sp. in *Temenuchus pagodarum* **294c.**
— *monenteron* n. sp. in robin 55r.

Macacus rhesus, *oesophagostomiasis* in **561a.**
Macdonaldius carinii n. sp. in *Elapomorphus tricolor* **68g.**

Macielia chagasi n. sp. **640e.**
— *macieli* n. g., n. sp. **640e.**
Macravestibulum obtusicaudum, life-history **160g.**
Macroderoides to Plagiorchidae **390f.**
— *typicus* in *Amia calva*, life-history **390f.**
Maculifer chandleri n. sp. in catfish 160d.
Madagascar, Schistosomiasis haematobia 18e.
Makaira ampla, *Tristomum* n. sp. in 591a.
Mammals, cestodes in **383c.**
—, helminths in **150a.**
—, *Metagonimus katsuradai* n. sp. in **396a.**
—, nematodes in **383j.**
Man, *Ancylostoma duodenale* in 97e.
—, ancylostomiasis in 5a, 29a, 45a, 223a, 230a, 252a, 256b, 304a, **327**, 367a, 384b, 415a, 417b, 437a, 545a, 565a.
—, ascariasis in 40d, **43a**, 65b, 69b, 219a, 220b, 225a, **269a**, 282b, 291d, 300a, 308a, 313a, 324a, 381a, 390m, 397b, 397c, 422a, 428a, 452a, 467a, 488b, 524b, 546a, 546b, 546c, 579b, 601a, 641c.
—, Ascaris in 100d, 104a, 132b, 142a, **144a**, 147b, 147c, **170b**, **193b.**
—, *Ascaris lumbricoides* in **4b**, **455a**, **462c.**
—, *Bertiella studeri* in 341a.
—, *Capillaria hepatica* in **390b.**
—, carbon tetrachloride 32a, 32b, **126a.**
—, cardiac heterophyids **391a.**
—, clonorchiasis in **312g**, **363b**, 695a.
—, Clonorchis in **502b**, **591e**, 641d.
—, — *sinensis* in 11b, 569b.
—, concentrated Fouadin **404d.**
—, creeping eruption in **451a.**
—, cysticerciasis in 205a, 241a, 258a, 333a, 337a, 354b, **354c**, **371a**, 392a, 398b, 404f, **411a**, 434a, 446a, 461c, 483a, 622b, 664a.
—, Cysticerciasis cellulosae in 38b, **85a**, **107a**, **135a**, 135b, 253a.
—, *Diphyllobothrium cordiceps* in **133zc.**
—, — *latum* in **103a**, **284c.**
—, dracontiasis in 442a.
—, Dracunculus in 105b, 118a.
—, elephantiasis in 40c.
—, Fasciola in 641e, 641g.
—, — *hepatica* in 98a, **143a**, 347a, 588a, 641a.
—, fascioliasis in **489a**, 502a.
—, fasciolopsiasis in 312h, 569a.
—, filaria in 126j.
—, filariasis in **25b**, **40a**, 40b, 69d, 273a, **312ze**, 416a, 416b, **433a**, 523a, 619a, **687a.**
—, — bancrofti in 312j, 357a, 458b, 458c, **576a.**
Man, Gnathostoma in 95c.
—, *Gongylonema pulchrum* in **121c**, **390b.**
—, helminthiasis in 42e, 110a, 147a, 194a, 203a, 220a, 290b, **317a**, **336a**, 358d, 390 0, 401a, 404g, 439a, 450a, 461b, **484a**, **484b**, 502c, 502d, **537a**, 539a, 547a, 549a, 563a, 564a, **567b**, 567c, 605a, 605b, **652a**, 673a, **673b**, 723.
—, helminthiasis and appendicitis in **687b.**
—, helminthic anaemia in **126k**, **593a.**
—, helminths in **36p**, 97a, 107c, 107d, **115a**, **130b**, 132a, 143c, 238a, 260a, 289a, 310a, **312o**, **312r**. **312u**, 312v, 312w, 312x, **312zd**, **470a**, 491a, **529a**, 535a, 535c, 592a, 636a, 636b, 638b, 639a, 639b, 641i, 641 l, 685a, 685b.
—, — and appendicitis in **453b.**
—, — — diarrhoea in **429a.**
—, *Heterodera marioni* in **34a.**
—, *Heterophyes* n. sp. in **284a.**
—, heterophyid ova in heart **134a.**
—, hookworm in **84a**, 95b, **105c**, 112a, 118b, 126i, 140a, 140b, 143b, **261a**, **312k**, **312t**, 548a, **608c.**
—, —, anaemia in **342c**, 550a, 587a, 587b.
—, — disease in **91a.**
—, hydatid in 57a, 63a, 64a, 159a, 167a, 170a, 171a, 185a, **582a.**
—, hydatidosis in 17a, 17b, 18a, 191a, 201a, 231a, 231b, 233a, 234a, 266a, **273b**, 290a, 291a, 291b, 296a, 302a, 303a, 305a, **312i**, 329a, 334a, 345a, 351a, 353a, 355a, 364a, 374a, 375a, 379a, 379b, 397a, 402a, 405a, 406a, 406b, 407a, 410a, 412a, 420a, 429c, 436a, 438a, 440a, 441a, 445a, 461a, 474a, 474b, 474c, 478a, 488c, 488d, 491b, 493a, 498a, 501b, 504a, 504b, 509a, 515a, 515b, 515c, 524a, 524c, 532a, 554a, 558a, 575b, 586a, 604a, 605c, 612a, 620a, 632a, 632b, 634a, 642a, 642b, 642c, 651a, 657a, 657c, 662a, 662b, 677a, 677b, 677c, 693a.
—, *Hymenolepis nana* in 65a, 174b, 390m.
—, Hymenolepiasis nana in **579a.**
—, liver-fluke in 263a.
—, *Loa loa* in 86a, **344a**, **373a.**
—, Microfilaria in **256a.**
—, — *malayi* in **235a.**
—, — *volvulus* in **398a.**
—, Necator in 143b.
—, nematode disease in 403a.
—, nematodes in 297b, 390m, **403b**, **668a.**
—, ocular filariasis in 521a, 538a.
—, — helminthiasis in 517a.
—, Onchocerca in 88b, 105a, **588b.**
—, — *volvulus* in 482a.

Man, onchocerciasis in **40e**, **69c**, 339a, **448a**, **643a**.
—, oxyuriasis in 20b, **53a**, 192a, 312n, 381a, 644a.
—, Oxyuris in 427a, **574a**, 638a.
—, paragonimiasis in 222a, **665a**.
—, Paragonimus in **312c**, **312d**.
—, parasites in 13b.
—, *Quisqualia indica* seeds **453a**.
—, *Rhabditis usuii* in **124a**.
—, Schistosoma in 88a, 97b, 97d, 100b, **126d**, 126e, 138a, **138b**, **138c**, 173a.
—, — *haematobium* in **18e**.
—, schistosomiasis in **11a**, 210a, **265a**, 277a, 282a, 301a, 338b, **394a**, 395a, 488a, 508a, 520a.
—, — and cancer in 34b.
—, — haematobia in 376a, 572a, 670a.
—, — mansoni in 346c, 387a, 471b, 492a, 677d.
—, strongyloidiasis in 463a, **589a**.
—, *Taenia saginata* in 130a.
—, Taeniasis solium in 575a.
—, *Thelazia* n. sp. in **206a**.
—, Trichinella in 96a, **155i**, **465b**, **585a**.
—, trichinelliasis in 29a, 254a, 271a, 274a, 274b, 279a, **384a**, **443a**, 663a, 678a.
—, trichuriasis in 332a.
—, Trichuris in **264a**.
—, various anthelmintics **429b**.
—, verminous appendicitis in 299a.
—, *Wuchereria bancrofti* in **116a**.
Manaosia braçodemoça n. g., n. sp. **155f**.
Manchuria, hookworm **312t**.
Mansonia uniformis, intermediary for *Microfilaria malayi* **312b**.
Mareca penelope, *Hindia* n. sp. in **615d**.
— —, *Notocotylus* n. sp. in **615c**.
Marmosets, *Tetrapetalonema* n. g., n. sp. in **69e**.
Mauritius, *Schistosoma haematobium* 92b.
Mayflies, 2nd intermediaries for *Alloglossidium corti* **390f**.
Mazama simplicicornis, *Ierestrongylus* n. g., n. sp. in **361a**.
— —, *Mazamanema* n. g., n. sp. in **361a**.
— —, *Mazamastrongylus* n. g., n. sp. in **361a**.
— —, *Nematodirus* n. sp. in **361a**.
Mazamanema longibursatum n. g., n. sp. in *Mazama simplicicornis* **361a**.
Mazamastrongylus trinitatis n. g., n. sp. in *Mazama simplicicornis* **361a**.
Meat inspection, cysticercus 111a, 111b, 111c, **186a**, **186b**.
— —, liver cysticerci **165a**.
— —, Trichinella **680a**.
Mecistocirrus digitatus in cattle in Costa Rica **160j**.
Mediorhynchus sipocotensis n. sp. in *Penelopides manillae* **156b**.
Megacustis multispinosus n. g., n. sp. in *Anolis carolinensis* **36i**.
Megalobatrachus japonicus, *Liolope copulans* in **154a**.
Megasolena estrix, taxonomy **155k**.
Megasoleninae n. subf. **155k**.
Melania libertina, 1st intermediary for *Paragonimus* **107e**.
— *tuberculata*, cercaria in **32d**.
Mephitis elongata, *Oochoristica* n. sp. in **41a**.
Mermis maroccano n. sp. **200a**.
— *myrmecophila* in *Acanthamyops flavus* **626a**.
Mesocestoides ambiguus valid **525b**.
Mesocoelium danforthi n. sp. in *Celestus pleii* 55s.
Mesodendrium reviewed **613a**.
— *elongatum* n. sp. in *Vesperugo abranus* **613a**.
— *mödlingeri* n. sp. in *Nycticejus kuhli* **613a**.
Metabolism, *Clonorchis sinensis* **154b**, **154c**.
Metabronema truttae n. sp. in brown trout **200a**.
Metacercariae in life-history problems 390m.
— — *Pseudorasbora parva* in Japan **382b**.
Metachirops opossum, *Capillaria* n. spp. in **476a**.
Metagonimoides sp. cercaria in *Goniobasis nigrina* **68c**.
Metagonimus katsuradai n. sp. in mammals, life-history **396a**.
Metascocotyle to *Phagicola* **160b**.
Metastrongyle, see also Lungworms.
— disease in pig 697a.
Metastrongylus spp. in Uruguay **497a**.
— *elongatus* oesophagus **139a**.
Metorchis orientalis in duck **382b**.
Mexico, human helminths 638b.
Micracanthorhynchus motamurai n. g., n. sp. in *Zacco* sp. **590a**.
Microcysts and *Heterodera schachtii* **127a**.
Microfilaria in *Bonasa umbellus* **106a**.
— — man in Philippines **256a**.
— — *Rana esculenta* **471a**.
— sp. in *Rana esculenta* 13a.
— *bancrofti*, periodicity 180a, **180c**.
— —, technique for staining **174d**.
— *immitis*, filtration in lymph nodes **180b**.
— —, technique for detecting **597a**.
— *malayi* in man in Sumatra **235a**.
— — — mosquitoes in China **312b**.
— —, periodicity 262a.
— *volvulus* in man in England **398a**.
Microfilariae in birds in India **615a**.
— — *Philander* sp., longevity **18d**.

Microfilariae in U.S.A. 390m.
Microparyphium capellae n. sp. in bird **383a**.
Mink, Japanese, *Gnathostoma spinigerum* in **312q**.
Mnemodhneria nom. nov. for *Odhnerium* **360a**.
Moennigia moennigi n. g., n. sp. **640e**.
Mola mola, Floriceps saccatus in **214a**.
Molluscs, cercariae in 42d, 390m.
—, intermediaries for *Aelurostrongylus abstrusus* **122a**, **162h**, **321c**.
—, — — *Crenosoma vulpis* **369a**.
—, — — *Eustomos chelydrae* **36e**.
—, — — *Syngamus trachea* **125a**.
—, — — *Telorchis robustus* **55t**.
—, 2nd intermediaries for *Echinostoma coalitum* **160e**.
—, schistosome intermediaries, bionomics **193a**.
—, trematodes in **87a**.
Molossidae, *Capillaria* n. sp. in **640d**.
Monhystera cambari n. comb. redescribed **160r**.
Moniezia in sheep, bionomics **82a**.
— spp. in sheep, arsenic trisulphide **117a**.
— — — —, arsenious sulphide **31a**.
— *benedeni* in cattle in Costa Rica **160j**.
— *expansa* in gazelle **278a**.
— — — sheep, bionomics **331a**.
— — — —, epidemiology 390m.
Monkeys, Filariids in 390m.
Monodontus floridanus n. sp. in *Sigmodon hispidus* **68e**.
Monopylidinae n. subf. **503a**.
Monorchotrema spp. ova in heart of man **134a**.
—*calderoni* n. sp. in dog **284b**.
— *taakree* n. sp. in *Pseudeutropius taakree* **430a**.
Monticellia spinulifera n. sp. in fish **617a**.
Morocco, hydatid **582a**, **582b**.
Mosesia chordeilesia n. sp., life-history 390m.
Mosquitoes, *Filaria bancrofti* in **36c**.
—, intermediaries for *Filaria* spp. **363a**.
—, *Microfilaria malayi* in **312b**.
Motacilla cinerea, Anonchotaenia n. sp. in **59b**.
Mouse, *Ancylostoma caninum* in 390m.
—, *Enterobius* n. sp. in **383j**.
—, Gongylonema & cancer in **645a**.
—, *Hymenolepis fraterna* in **360**.
—, — *nana* in **193c**.
—, hydatid in **109a**.
—, *Longistriata musculi* in **41c**.
—, *Nippostrongylus muris* in **133q**, **193d**.
Mule, Cylicostomiasis tetracantha in **18f**.
Muraenesox cinereus, Lecithocladium n. sp. in **283a**.
Mus spp., *Pulmonema* n. g., n. sp. in **87f**.
— *norvegicus*, Cercariae in **42c**.
Musculium partumeium, 1st intermediary for *Gorgodera amplicava* **603a**.
Musk-rat, helminths in **90a**.
Mussel, *Cercaria* sp. in **155g**.
Mustard, *Heterodera schachtii* in **536a**.
Mustela vison, Taenia tenuicollis in **155d**.
Mycteria mycteria, Capillaria n. sp. in **268a**.
Myliobatus californicus, Probolitrema n. sp. in 390d.
Myotis lucifugus, Limatulum n. sp. in 160c.
— —, *Gyrabascus* n. g., n. sp. in **390j**.
Mytilus edulis, Bucephalus n. sp. in **155g**.
Myzomela sp., *Oxyspirura* n. sp. in **200a**.
Myzophorus dorād n. sp. in fish **617a**.
— *pirarará* n. sp. in fish **617a**.
— *sudobīm* n. sp. in fish **617a**.

Naja naja, Diphyllobothrium n. sp. in **383c**.
Narcissus, *Anguillulina dipsaci* in **93d**.
—, — *pratensis* in **93d**, **158d**.
—, *Aphelenchoides* n. sp. in **127 l**.
Nasal granuloma in cattle in Sumatra **311a**.
Nasitrema spathulatum n. g., n. sp. in *Neophocaena phocaenoides* **568a**.
Nasitrematinae n. subf. **568a**.
Natrix rhomberifera, Neochasmus n. sp. in **36i**.
— *sipedon, Dasymetra* n. sp. in **178h**.
— —, helminths in **599a**.
Naviformia n. g. for *Notocotylus naviformes* **615d**.
Necator, see also Hookworm.
—, anthelmintics, **3b**.
— disease in man 143b.
— *okapi* n. sp. in okapi **432b**.
— *suillus*, specific identity **127b**.
Nectomys squamipes, Physaloptera n. sp. in **68g**.
Nematobothriinae n. subf. **383e**.
Nematobothrium (*Benedenozoum*) *sabae* n. subg., n. sp. **383e**.
— (*Maclarenozoum*) n. subg. **383e**.
Nematode disease in coffee **468a**.
— — — man 403a.
— — — potato in Russia **426a**.
— ova killed by ultra-violet light **457c**.
— in salmon 506b.
Nematodes in Amphibia in Japan **383g**.
— — —, reviewed **36d**.
— — birds in Japan **383i**.
— — canines, tetrachlorethylene **684k**.
— — coffee, control **217a**.
— — Crustacea **160r**.
—, Dioxen as clearing agent **77b**.
—, ectoparasitic, on *Ips* spp. **674a**.

Nematodes in fishes in Brazil **494e**.
— — — — Japan **383f**.
—, free-living **696a**.
—, —, captured by fungi **148a**.
—, —, copper sulphate **55d**.
—, —, & disease in cotton **424a**.
—, —, key to genera **55a**.
—, — in Zuidersee **320a**.
—, —, n. spp. in Belgian Congo **60a**.
—, —, 6 n. spp. in West Africa **10a**.
—, haematophagic **675a**.
— in horse, control **393a**.
— — human appendix 390m.
—, immunity 506d.
— in mammals in Japan **383j**.
— — man, hexylresorcinol **668a**.
— — — in Irish Free State **403b**.
— — — — Puerto Rico 297b.
—, marine 77d, **577a**.
—, —, semi-sessile habit **189d**.
—, —,1 n. g., 3 n. spp. **577b**.
—, —, 4 n. gg., 45 n. spp., in Baltic **528a**.
—, —, 1 n. sp. **544a**.
—, —, 8 n. spp. **267a**.
— monographed **713**, **714**.
—, parasitic **181a**.
—, physiology **239b**.
— in pig, development **667a**.
—, plant-parasitic 629a, **698**.
—, — —, in England **704**.
—, — —, — U.S.A. **609a**.
—, plant, technique for staining **486a**.
— in plant tissues, stained **424c**.
— — plants 8a.
— — — in Denmark **309a**.
— — —, fumigants **281a**.
— — — in Germany, control **146a**.
— — —, pathology **239a**.
— — — in Russia **400a**.
— — —, transfer to new hosts **158f**.
— — — in U.S.A. **286a**, **286b**.
— — rabbits, anthelmintics **152a**.
— — Reptilia in Japan **383h**.
— — ruminants, & husbandry **684g**.
— — *Saiga tatarica* 55m.
— — sheep, control **151a**.
— — —, larval differentiation **160o**.
— — —, location **270a**.
— — —, treatment **247a**.
—, small, collecting technique **188b**.
—, technique for clearing **633a**.
—, 8 n. spp., associated with *Dendroctonus monticolae* **120b**.
Nematodirella longispiculata, 4 n. subspp., in deer **55n**.
Nematodirus spp. in Uruguay **497a**.
— — in sheep in New Zealand **33g**.
— *tarandi* replacing *N. skrjabini* 55k.
— *urichi* n. sp. in *Mazama simplicicornis* **361a**.
Nematotaenia jägerskiöldi to *Baerietta* **647a**.
Neoaplectana glaseri in *Popillia japonica*, biological control **251a**.
Neocephalobus compsus n. sp. **160u**.
Neochasmus labeosus n. sp. in *Natrix rhomberifera* **36i**.
Neodiplostoma sp. in *Crocodilus cataphractus* **343a**.
— *thomasi* n. sp. in *Osteolaemus tetraspis* **343a**.
Neodiplostomum impraeputiatum 647c.
— *lucidum* cercaria **68b**.
— *minimum* redescribed **59a**.
— *tytense* n. sp. in *Tyto alba* **294c**.
Neoechinorhynchus zacconis n. sp. **383d**.
Neophocaena phocaenoides, new trematodes in **568a**.
Neotylenchus abulbosus in sugar-beet **55c**.
— — — *Tritonia* sp. **158b**.
— *latus* n. sp. in *Atriplex confertifolia* in U.S.A. **244a**.
New Zealand, Aphelenchoides **418a**.
— —, hydatidosis **209a**.
— —, *Nematodirus* spp. **33g**.
Nigeria, human helminthiasis **317a**.
Nippostrongylus muris in mouse, pathology **133q**.
— — — *Peromyscus maniculatus* 133z.
— — — rat, immunity **82c**, **82e**.
— — — —, — & nutrition **193e**.
— — — — & mouse, immunity compared **193d**.
Nomadacris septemfasciata, cysticercoid in **421c**.
Nomenclature, emended spellings **55h**.
—, *Ophiotaenia perspicua* **599a**.
Nomimoscolex sudobīm n. sp. in fish **617a**.
North America, Gyrodactyloidea 390m.
— —, rabbit parasites 390m.
Norway, *Dicrocoelium dendriticum* **48a**.
—, *Fasciola hepatica* **325a**.
—, reindeer helminths **419a**.
Nothura maculosa, *Capillaria* n. sp. in **268a**.
— —, *Hadjelia* n. sp. in **68g**.
Notocotylus reviewed **615d**.
— *babai* n. sp. in kite **26f**.
— *imbricata* in poultry, life-history **76a**.
— *indicus* n. sp. in *Mareca penelope* **615c**.
— *urbanensis* in duck, life-history **390p**.
Nutria, parasitosis in **447b**.
Nutrition of ascarid 390m.
—, ascaris larvae **720**.
—, hookworm **3d**.
— & hookworm anaemia **312za**.
—, *Nippostrongylus muris* **193e**.
—, *Trichuris* **264a**.
Nyasaland, ancylostomiasis **25a**.
Nycticebus tardigradus, *Raillietina* n. sp. in **59c**.
Nycticejus dormeri, *Pycnoporus* n. spp. in **292d**.

Nycticejus kuhli, Mesodendrium n. sp. in **613a.**
Nycticorax nycticorax, Polymorphus n. sp. in **156b.**
Nygolaiminae n. subf. **160s.**

Oats, *Anguillulina dipsaci* in **62a.**
—, *Heterodera schachtii* in **93a, 127g,** 158a, **656a.**
Odhneriotrema incommodum in *Alligator mississipiensis* **36f.**
Odhnerium to *Mnemodhneria* nom. nov. **360a.**
Odocoileus virginianus, Gongylonema spp. in **160k.**
— —, lungworms in 55 o.
— —, *Pneumostrongylus* n. sp. in 178d.
— —, *Protostrongylus* n. sp. in 178d.
Oesophagostomes, treatment 81b, 232c.
Oesophagostomiasis in *Macacus rhesus* **561a.**
— — sheep, treatment **600a.**
Oesophagostomum bifurcum in *Cercocebus* sp. **87b.**
— *longicaudum* to *O. quadrispinulatum* 133j.
— *okapi* n. sp. in okapi **432b.**
— *quadrispinulatum* replacing *O. longicaudum* 133j.
— *rodhaini* n. sp. in *Okapia johnston* **650b.**
Okapi, helminths in **432a, 432b.**
—, *Oesophagostomum* n. sp. in **650b.**
—, *Parabronema* n. sp. in **650b.**
Oligoplectus n. g. for fossil Plectidae **55e.**
Ommatobrephus folium to *O. lobatum* **624c.**
Onchocerca in man in America **588b.**
— nodules, histology **87c.**
— *cervicalis* in horse **534a.**
— *cervipedis* n. sp. in deer in U.S.A. **189a.**
— *gutturosa* in cattle, life-history **460d.**
— *volvulus* in man 482a.
Onchocerciasis in man 88b, 105a, 339a.
— — — in Africa **643a.**
— — —, ecology **448a.**
— — — in Kenya **40e.**
—, ocular, in man in Sudan **69c.**
— cervicalis in horse **460d.**
Oncicola canis in dog in U.S.A. **385a.**
Oncomelania hupensis, bionomics **312e.**
Oncorhynchus kisutch, Cystidicola n. sp. in **75c.**
Ondatra zibethica, Cysticercus talpae in **155d.**
Onion, *Anguillulina dipsaci* in **39a.**
Oochoristica spp. redescribed **647a.**
— *americana* to *O. osheroffi* **160a.**
— *hainanensis* n. sp. **647a.**
— *mephitis* n. sp. in *Mephitis elongata* **41a.**
Ophicephalus striatus, Euclinostomum n. sp. in **608b.**
Ophidascaris natricis n. sp. in reptile **383h.**
— *trichuriformis* n. sp. disease in snakes **494c.**
Ophiosacculus n. g. for *Distomum méhelyi* **390j.**
Ophiotaenia japonensis n. sp. in snakes **383c.**
— *nankingensis* n. sp. **647a.**
— *perspicua*, systematics **599a.**
Ophiovalipora houdemeri n. g., n. sp. **647a.**
Opisthioglyphe ranae in *Rana esculenta*, life-history **224a.**
Opistholebes cotylophorus n. sp. in *Diodon holacanthus* **614b.**
Opisthorchis, revision & key to spp. **464b.**
— *felineus*, concentrated Fouadin **404d.**
— —, life-history **312p.**
— — in Russia **404h.**
— *ophidiarum* n. sp. in *Lapemis hardwickii* **608b.**
Oporornis philadelphia, Urotocus n. sp. in **36g.**
Opossum, *Brachylaemus virginiana* in **178b.**
—, filariid in **221a.**
Orchipedum isostoma in carnivores, life-history **4f.**
Oreortyx picta, Gongylonema ingluvicola in **55p.**
Orientophorus brevichrus n. g., n. sp. in *Clupea ilisha* **155j.**
— *clupii* n. sp. in *Clupea ilisha* **155j.**
— *gangeticus* n. sp. in *Clupea ilisha* **155j.**
— *ilishii* n. sp. in *Clupea ilisha* **155j.**
Ornithonema mensoris n. g., n. sp. in pigeon **527d.**
Orthosplanchnus elongatus n. sp. in *Neophocaena phocaenoides* **568a.**
Oslerus osleri disease in dog **70a.**
Osteolaemus tetraspis, Neodiplostoma n. sp. in **343a.**
Ostertagia tarandi n. sp. in reindeer **419a.**
Ostiolum mehrai n. sp. in *Ptyas* spp. **624c.**
Oswaldocruzia brasiliensis n. sp. in *Drymobius bifossatus* **409a.**
— *hoepplii* n. sp. in toad **187a.**
— *mazzai* n. sp. **640e.**
— *natalensis* n. sp. in *Rana delandii* **36d.**
Otobothrium robustum n. sp. in sea trout **133i.**
Ovis canadensis, Protostrongylus stilesi in 160m.
Owl, *Parhamatospiculum* n. sp. in **36j.**
Oxyspirura conjunctivialis in lemur **59c.**

Oxyspirura myzomelae n. sp. in *Myzomela* sp. **200a.**
Oxyuriasis in chimpanzee 291c.
— — man 20b, 192a, 312n, 381a.
— — —, control **53a.**
Oxyuris, see also Enterobius.
— in man, life-history 427a.
— *vermicularis*, infection via nose **188c.**
— —, "*Oxyaskarin*" **408a.**
Oxyuroids in lizards in Brazil **494a.**
Ozolaimidae n. fam. **494a.**

Palaeontology, nematodes **55e.**
Palestine, hydatid **342b.**
Panagrodontus dentatus n. g., n. sp. **120b.**
Panagrolaimus heterocheilus n. sp. **160u.**
Panama, *Capillaria hepatica* **390b.**
—, filariids 390m.
—, *Gongylonema pulchrum* **390b.**
Panopistus pricei in *Blarina brevicauda*, life-history **52a.**
Parabronema okapi n. sp. in okapi **432b.**
— *okapiae* n. sp. in *Okapia johnstoni* **650b.**
Parachordodes arndti n. sp. **321a.**
— *densareolatus* n. sp. [lapsus for *propareolatus* ?] **321a.**
— *lestici* n. sp. in *Lesticus magnus* **468a.**
— *propareolatus* n. sp. **321a.**
— *sciacchitanoi* n. sp. **468a.**
Parachordodinae n. subf. reviewed **321a.**
Paracladotaenia accipitris n. g., n. sp. in *Accipiter virgatus* **383b.**
Paracooperia n. g. for *Cooperia serrata* **640e.**
Paradilepis revised **525b.**
— *duboisi* n. g., n. sp. **647a.**
Paradistomum excalotes n. sp. in *Calotes calotes* **608b.**
Paragonimiasis in man 222a.
— — —, carpain hydrochloride **665a.**
Paragonimus, life-history **312c, 578b.**
— in China, life-history **42b, 107e.**
— — dog in India **26c.**
— — man in China **312c, 312d.**
— metacercaria excystment **162b.**
— *westermanni*, embryology 154d.
— — in lion 246a.
— —, miracidium 154f.
Paragordiinae n. subf. **321a.**
Paragordionus n. g. **321a.**
Paragordius diverselobatus n. sp. **189b.**
Paraguay, hookworm 95b.
Parahemiurus australis n. sp. in fish **155h.**
Paralecithodendrium, 2 n. spp. in bats 390m.
Paramonostomum bucephalae n. sp. in bird **383a.**
— *ovatus* n. sp. in duck **606c.**
Paramphistomum chinensis n. sp. in cattle **678a.**
Paranematospira muris n. g., n. sp. in *Apodemus* spp. **721.**
Paranisakis lophii n. sp. in fish **383f.**
— *muraenesocis* n. sp. in fish **383f.**
Parantorchis chaetodonis replaced by *P. chaetodontis* **87d.**
Paraplagiorchis szidati n. sp. in *Crocidura mimula* **721.**
Parapolystoma n. g. **568b.**
Parascaris equorum, respiration **654a.**
Parasitaphelenchus redefined **160u.**
Parasites in birds 390m.
— — Canary Islands 635a.
— — dog & cat 58b.
— — domestic animals, control 46b.
— — faeces 13b.
—, local records **465c.**
— in rabbit in N. America 390m.
— — rat 390m.
— — *Rhombomys opimus* in Russia **187c.**
— — sheep, control **435a.**
Parasitism, false **465c.**
—, origin **195b.**
Parasitology 346a.
— in China **312z.**
—, discussion **36a, 70b.**
—, human, text-book **469.**
— and public health 316a, 362a.
Parasitosis in nutria **447b.**
— — poultry 16a.
Parhamatospiculum bubicola n. sp. in owl **36j.**
Paricterotaenia spp. **503a.**
— *cirrospinosa* n. sp. in snipe **326a.**
Parlitomosa zakii n. g., n. sp. in *Leontocebus rosalia* **126 l.**
Paronia pycnonoti n. sp. in bird **383b.**
Parorchis avitus to *P. acanthus* 390m.
Parsley, *Anguillulina dipsaci* in **424b.**
Partridge, helminths in **127h.**
Parvirostrum magnisomum to *Taufikia* **499a.**
Passalurus ambiguus in rabbit, treatment **454b.**
Passer domesticus, *Choanotaenia passerina* in **133zd.**
Pathology, ancylostomiasis 197b.
—, *Ascaris lumbricoides* **4b.**
—, *Eurytrema pancreaticum* **176b, 235c.**
—, *Fascioloides magna* **19a, 177a.**
—, helminth extracts **404b.**
—, *Nippostrongylus muris* **133q.**
—, Onchocerca **87c.**
—, perch helminths **133t.**
—, plant nematodes **239a.**
—, *Setaria haemorrhagica* **4e.**
—, *Strongyloides stercoralis* **207a.**
Pea, *Heterodera schachtii* in **61a, 123a.**
Peanut, *Cephalobus* in 425a.
Pegosomum bubulcum n. sp. in *Bubulcus coromandus* **608b.**
Penelopides manillae, *Mediorhynchus* n. sp. in **156b.**

Perch, helminths in **133t.**
Peromyscus gossypinus, Scaphiostomum pancreaticum in **160i.**
— *maniculatus, Nippostrongylus muris* in 133z.
Petasiger grandivesicularis n. sp. in grebe **119a.**
Pfenderius birmanicus n. sp. in Indian elephant **26e.**
Phaneropsolinae n. subf. **292i.**
Phaneropsolus insolens to *Pleuropsolus* n.g. **292i.**
Pharyngodon cesarpintoi n. sp. **494a.**
— *travassosi* n. sp. **494a.**
Phasianus colchicus, Capillaria n. sp. in **268a.**
Pheasant, *Capillaria annulata* in **36h.**
—, Syngamiasis trachea in **33c.**
Philander sp., microfilariae in **18d.**
Philippines, *Bertiella* 156a.
—, *Diphyllobothrium latum* **284c.**
—, *Fasciola hepatica* **608a.**
—, helminthiasis 628a.
—, Heterophyidae **284a, 284b.**
—, human hookworm **608c.**
—, — microfilaria **256a.**
—, stephanuriasis **423a.**
Philometra opsalichthydis n. sp. in fish **383f.**
— *parasiluri* n. sp. in fish **383f.**
— *seriolae* to *Philometroides* n. g. **383f.**
Philometroides n. g. for *Philometra seriolae* **383f.**
Phoca sp., *Corynosoma* n. sp. in **590a.**
— —, *Plerocercoides* n. sp. in **630a.**
— *vitulina, Ascaris osculata* in 153a.
Phocaena phocaena, Diphyllobothrium stemmacephalum in 481b.
Phryganea, 2nd intermediary for *Pleurogenes claviger* **366a.**
Phyllodistomum, key to spp. **178a.**
Phyllotreta spp., *Howardula phyllotretae* in **127k.**
Physa acuta, 2nd intermediary for *Lepoderma ramlianum* **390e.**
— *fontinalis, Cercaria dubia* in **514b.**
— *helei*, intermediary for *Dasymetra villicaeca* **178g.**
— —, — — *Renifer aniarum* **178g.**
Physaloptera in fowl 358b.
— *achari* n. sp. in *Calotes versicolor* **292f.**
— *bispiculata* n. sp. in *Nectomys squamipes* **68g.**
Physiology, *Ascaris lumbricoides* **694a.**
—, — *suilla* **616a.**
—, cestode larvae 686a.
— of helminths, reviewed **157a.**
—, nematodes **239b.**
—, *Parascaris equorum* **654a.**
—, Schistosoma adults **162e.**
—, *Strongyloides simiae* **162g.**
Pig, ascariasis in **370a.**
—, *Ascaris lumbricoides* in **455a, 462c.**
—, chenopodium oil **689a.**
Pig, *Dictyocaulus* n. sp in **187a.**
—, helminthiasis in 70d.
—, helminths in 4g, 81a, **312r.**
—, hydatidosis in 618a.
—, lungworms in 390m.
—, metastrongyle disease in 697a.
—, nematodes in **667a.**
—, stephanuriasis in 358c, **423a.**
—, *Stichorchis giganteus* in **494d.**
—, stomach worms in **684e.**
—, Trichinella in **72d, 622a.**
Pigeon, helminthiasis in 573a, **649b.**
—, *Ornithonema* n. g., n. sp. in **527d.**
—, trematode disease in **692a.**
Pike, Triaenophorus & " Pest " in **681a.**
Pineapple, *Heterodera marioni* in **128a.**
—, wilt disease in **58a.**
" Pining " in sheep **560a.**
Pintonema intrusa n. sp. **640e.**
— *pintoi* n. g., n. sp. **640e.**
— *pseudopulchra* n. sp. **640e.**
— *pulchra* n. sp. **640e.**
Pisidium obtusale, Cercaria macrocerca in **487a.**
Plagiorchis maculosus disease in *Cypselus apus* **653b.**
— — in *Hirundo rustica* 75b.
Planorbis spp., 1st intermediaries for *Clinostomum heluans* **22b.**
— *boissyi*, 2nd intermediary for *Lepoderma ramlianum* **390e.**
Plants, herbaceous, *Heterodera marioni* in **425b.**
—, *Heterodera marioni* in **190.**
Plants, nematodes in 8a, **239a, 281a, 286a, 286b, 309a, 400a.**
—, new hosts for nematodes **158b, 158e, 158f.**
Platyhelmia in Cuba, check-list **591b, 591d.**
Platynosomum philippinorum to *Anchitrema* **292d.**
Plecoglossus altivelis, intermediary for *Exorchis* n. sp. 154e.
Plerocercoides portieri n. sp. in *Phoca* sp. **630a.**
Plerocercoids in trout 559a.
Pleurogenes claviger in Amphibia, life-history **366a.**
Pleuropsolus n. g. for *Phaneropsolus insolens* **292i.**
Pluvialis fulvus, Echinostoma n. sp. in **608b.**
Pneumostrongylus alpenae n. sp. in *Odocoileus virginianus* 178d.
Poland, dog helminths **688c.**
—, Trichoneminae **688a.**
Polyanthes tuberosa, Acrobeles n. sp. in **55b.**
Polygyra thyroides, intermediary for *Brachylaemus virginiana* **178b.**
Polymorphus capellae n. sp. **383d.**
— *frontospinosus* n. sp. in *Nycticorax nycticorax* **156b.**

Polystoma integerrimum nearcticum n. subsp. in *Hyla versicolor* 390m.
Polystomatidae, key to genera **568b**.
Polystomoides, key to spp. **568b**.
— *coronatum* to *Parapolystoma* n. g. **568b**.
— *exhamatum* n. sp. in *Clemmys japonicus* **568b**.
— *japonicum* n. sp. in *Clemmys japonicus* **568b**.
Polystomum integerrimum, neoteny **676a**.
Popillia japonica, *Neoaplectana glaseri* in **251a**.
Porrocaecum larvae in *Sorex araneus* **36k**.
— *rochalimai* n. sp. **494e**.
— *secundum* n. sp. in fish **163a**.
— *trichiuri* n. sp. in fish **163a**.
Portugal, *Schistosoma haematobium* **218a**.
Potamon denticulatus, 2nd intermediary for *Paragonimus* **312c**.
Potato, *Anguillulina dipsaci* in **127d**.
—, *Heterodera schachtii* in **35a**, **39a**, **137a**.
—, nematode disease in **426a**.
— sickness & *Heterodera schachtii* **127c**.
Poultry, helminthiasis in **179a**, **699**.
—, helminths in 184g.
—, heterakiasis in **531d**.
—, *Hymenolepis cantaniana* in **139b**.
—, *Hypoderaeum* n. sp. in **606c**.
—, *Notocotylus imbricata* in **76a**.
—, parasitosis in 16a.
—, trematodes in **606c**.
Proalaria alcedensis n. sp. in *Alcedo atthis* **294c**.
Probolitrema antarcticus n. sp. in fish **155h**.
— *californiense* n. sp. in *Myliobatus californicus* 390d.
— *philippi* n. sp. in fish **155h**.
Procamallanus reviewed **36m**.
— *barroslimai* n. sp. **494e**.
— *fariasi* n. sp. **494e**.
—*fulvidraconis* n. sp. in *Pseudobagrus fulvidraco* **36m**.
— *planoratus* n. sp. in *Clarias batrachus* **294d**.
— *sigani* n. sp. in fish **383f**.
— *wrighti* n. sp. **494e**.
Procephalobus to *Panagrolaimus* **160u**.
Prohemistomum syriacum redescribed **647b**.
Prosthecocotyla diplosoma n. sp. in *Delphis delphis* **630a**.
— *pachysoma* n. sp. in *Delphis delphis* **630a**.
Prosthodendrium to *Lecithodendrium* **292h**.
Prosthogonimiasis in fowl **660a**.
Prosthogonimus leei n. sp. in duck **606c**.
Protenes, key to species **36i**.
Protenes villosus n. sp. in *Pseudemys elegans* **36i**.
Proteocephalus australis n. sp. in fish **163a**.
— *elongatus* n. sp. in fish **163a**.
Proterometra macrostoma, gametogenesis 456a.
Protocladorchis n. g. for *Cladorchis pangasii* **68a**.
Protofilaria n. g. for *Filaria pertenue* **650a**.
Protostrongylus coburni n. sp. in *Odocoileus virginianus* 178d.
— *stilesi* in *Ovis canadensis* 160m.
Psarisomius dalhousiae, *Choanotaenia* n. sp. in **59b**.
Pseudemys elegans, *Cercorchis* n. sp. in **36i**.
— —, *Protenes* n. sp. in **36i**.
Pseudeutropius taakree, *Monorchotrema* n. sp. in **430a**.
Pseudhymenolepidinae n. subf. **224b**.
Pseudhymenolepis redonica n. g., n. sp. in *Crocidura russula* **224b**.
Pseudobagrus fulvidraco, *Procamallanus* n. sp. in **36m**.
Pseudocystidicola to *Metabronema* **200a**.
Pseudoporrorchis houdemeri n. g., n. sp. in *Centropus sinensis* **480a**.
Pseudorasbora parva, metacercariae in **382b**.
— —, *Urorchis* n. sp. in **553a**.
Pseudosuccinea columella, intermediary for *Fascioloides magna* **435a**.
— —, 1st intermediary for *Echinostoma coalitum* **160e**.
Psilochasmus japonicus n. sp. in ducks **119a**.
Psilorchis indicus n. g., n. sp. in kingfisher **294e**.
Ptyas spp., *Ostiolum* n. sp. in **624c**.
Public health regulations in Germany 72c.
Puerto Rico, filariasis **433a**.
— —, horse helminths **519a**.
— —, human nematodes 297b.
Pulchrostrongylus completus n. g., n. sp. **640e**.
Pulmonema cantonensis n. g., n. sp. in *Mus* spp. **87f**.
Pulmostrongylus fengi n. g., n. sp. in *Herpestes urva* **187a**.
Pycnoporus spp. to *Lecithoporus* n. g. **292i**.
— *indicus* n. sp. in *Nycticejus dormeri* **292d**.
— *loossii* n. sp. in *Nycticejus dormeri* **292d**.
Pyelosomum longicaecum n. sp. in *Caretta caretta* **133u**.

Quasistrongylus rheae to *Deletrocephalus dimidiatus* **22a**, **624b**, **633b**.

Rabbit, Anoplocephalinae in 390m.
—, *Clonorchis sinensis* in **154b, 154c.**
—, *Cysticercus pisiformis* in **82d.**
—, *Fasciola hepatica* in **133ze.**
—, *Fascioloides magna* in **597b.**
—, hydatid in **109a.**
—, hydatidosis in 30b.
—, parasites in 390m.
—, *Passalurus ambiguus* in **454b.**
—, Trichinella in **188a,** 390m.
Raillietina spp. in fowl, life-history 390m.
— *crepidocotyle* n. sp. in *Garrulax chinensis* **59b.**
— *madagascariensis* in rats in Formosa **174c.**
— (*Parionella*) *huebscheri* n. sp. **647a.**
— (*Raillietina*) *galli* n. sp. in bird **383b.**
— — *pici* n. sp. in bird **383b.**
— — *sinensis* n. sp. **647a.**
— — *taiwanensis* n. sp. in bird **383b.**
— *röthlisbergeri* n. sp. in *Nycticebus tardigradus* **59c.**
— *vivieni* n. sp. in *Coturnix japonica* **59b.**
Rana spp., *Gorgodera amplicava* in **603a.**
— *clamitans*, *Halipegus occidualis* in **473a.**
— *delandii*, *Oswaldocruzia* n. sp. in **36d.**
— *esculenta*, *Euryhelmis squamula* in **224a.**
— —, microfilaria in **471a.**
— —, *Microfilaria* sp. in 13a.
— —, *Opisthioglyphe ranae* in **224a.**
— *hexadactyla*, *Spironoura* n. sp. in **90c.**
— *montezumae*, *Dibulbiger* n. g., n. sp. in **85b.**
— —, *Foleyellides striatus* in **85b.**
— —, *Spiroxys* n. sp. in **85b.**
— *pipiens*, *Camallanus* n. sp. in **36d.**
Rape, *Heterodera schachtii* in **536a.**
Raphidascaris anchoviellae n. sp. in fish **163a.**
— *chirocentri* n. sp. in fish **383f.**
Rat, Cysticercus in 235b.
—, — *fasciolaris* in **3a, 3e.**
—, *Echinostoma macrorchis* in **382a.**
—, eosinophilia in 195a.
—, *Gongylonema neoplasticum* in **37a.**
—, helminths in **142b, 338a.**
—, *Hymenolepis nana* in **484c.**
—, *Nippostrongylus muris* in **82c, 82e, 193d, 193e.**
—, parasites in 390m.
—, *Raillietina madagascariensis* in **174c.**
—, *Schistosoma japonicum* in **257a.**
—, trematodes in **382a.**
—, *Trichinella* in **3c, 176c, 673e, 501a.**
—, trichinelliasis in 657b.
Reindeer, helminths in **419a.**
—, *Ostertagia* n. sp. in **419a.**
Renifer aniarum in reptile, life-history **178g.**
Reniferinae & Telorchiinae, relationship **133k.**
Reptile, *Dasymetra* n. sp. in **178g.**
—, *Renifer aniarum* in **178g.**
Reptilia, nematodes in **383h.**
Rhabdias nipponica n. sp. in amphibian **383g.**
Rhabditis 497b.
— *coarctata* in caterpillar **33d.**
— *filiformis*, tropisms **614a.**
— *gracilis* n. sp. **77a.**
— — to *R. graciliformis* nom. nov. **189e.**
— *ocypodis* n. sp. **160r.**
— *usuii* in man **124a.**
Rhabdochona amago n. sp. in fish **383f.**
— *girellae* n. sp. in fish **383f.**
— *gymnocrani* n. sp. in fish **383f.**
— *zacconis* n. sp. in fish **383f.**
Rhadinorhynchus trachuri n. sp. in *Trachurus japonicus* **590a.**
Rhinchotus rufescens, *Trichostrongylus* n. sp. in **640a.**
Rhipidocotyle transversale n. sp. in fish **163a.**
Rhombomys opimus, parasites in **187c.**
Rhombus maximus, *Bothriocephalus scorpii* in **514a.**
Rictularia spp. listed **409b.**
— *halli* n. sp. in *Eutamias striatus* 178f.
— *houdemeri* n. sp. in *Viverra zibetha* **187a.**
— *jaegerskioldi* n. sp. in *Caluromys philander* **409b.**
Robin, *Lyperosomum* n. sp. in 55r.
Rodents, *Longistriata* n. spp. in **41b.**
Roe-deer, stomach worm in **14a.**
Rossicotrema donicum, excretory system **321d.**
Ruminants, Dictyocaulus in **512b.**
—, helminthiasis in **460a.**
—, nematodes in **684g.**
—, stephanofilariasis in **272c.**
Russia, Cuculine helminths **485b.**
—, *Diphyllobothrium latum* **404i.**
—, dog helminths **342a.**
—, *Heterodera marioni* **581b, 581c.**
—, — *schachtii* **581c.**
—, human helminthiasis **673a, 673b.**
—, parasites **187c.**
—, plant nematodes **400a.**
—, potato nematodes **426a.**

Saiga tatarica, nematodes in 55m.
Salmo lewisi, *Bulbodacnitis* n. sp. in **679b.**
Salmon, nematode in 506b.
Salsify, *Anguillulina dipsaci* in **424b.**
Sanguinofilaria lateolabracis n. g., n. sp. in fish **383f.**
— *pinnicola* n. sp. in fish **383f.**
— *scomberomori* n. sp. in fish **383f.**

Scaphiostomum pancreaticum in *Peromyscus gossypinus* **160i.**
Sceloporus undulatus, *Strongyluris* n. sp. in **571a.**
Schistosoma adults, culture *in vitro* **162e.**
— disease in lung 79a, 83a.
— — — Lybia 97d.
— — — man 88a, 126e, 138a.
— — — —, splenomegaly **126d.**
— —, treatment 126c, **126f.**
— in Egypt, epidemiology **126b,** 126h.
—, immunological diagnosis **126g.**
— in man, antimony compounds 100b, **138c.**
— — —, control 173a.
— — —, Dn. 7 **138b.**
— *haematobium*, control 97b.
— — in E. Africa **346d.**
— — — Mauritius, life-history 92b.
— — — Portugal **218a.**
— — — Swaziland, control **394c.**
— *japonicum*, antimony compounds 312s.
— —, complement fixation **33f.**
— —, concentrated Fouadin **312f.**
— —, diagnostic technique **20a.**
— — in rats in Japan **257a.**
— — *in vitro*, antimony compounds **162f.**
— *nasalis* in cattle in India **240a.**
— *spindale* in zebu in Sumatra **311a.**
Schistosomes, control 372a.
—, larval movements 390m.
Schistosomiasis in Algeria 12a.
—, antimony compounds **11a.**
— & cancer in man 34b.
—, cerebral, in man 488a.
— in Egypt, control 505a.
—, Fouadin 208b.
—, haematuria 356b.
— in man 210a, 282a, 338b, 395a, 520a.
— — — in America **394a.**
— — — — Brazil 301a.
— — —, treatment **265a,** 508a.
— — — in U.S.A. 277a.
—, splenomegaly 356a.
— haematobia in Madagascar 18e.
— — — man 376a, 572a, 670a.
— —, treatment **459a.**
— mansoni in Brazil 507a, 507b.
— — — Eritrea 471b.
— — — man 346c, 387a, 492a, 677d.
— suis (?) in dog in India **26a.**
Schizamphistomoides tabascensis n. sp. in *Dermatemys mawii* 178c.
Scomberoides sp., *Ectenurus* n. sp. in **608b.**
Sea urchin, *Echinocephalus* larva in 133za.
Sellacotyle mustelae n. g., n. sp. 133a.
Sesarma dehaani, 2nd intermediary for *Paragonimus* **578b.**
Sesarma sinensis, 2nd intermediary for *Paragonimus* **578b.**
Setaria haemorrhagica in cattle in Tunis **4e.**
— *labiato-papillosa* in cattle in Costa Rica **160j.**
Setariine in cattle in India **378a.**
Severianoia magna n. sp. in Blattidae **631b.**
Shanghai, filarial nodules **74b.**
—, human helminths **312o.**
—, *Wuchereria bancrofti* **283b, 283c.**
Sheep, anthelmintics **99a, 99b,** 330a.
—, coenuriasis in 28b.
—, deglutition & anthelmintics in **600a, 600b.**
—, *Elaeophora* n. sp. in **189a.**
—, *Fascioloides magna* in **597b.**
—, helminthiasis in 183a, **551a,** 682a.
—, — & " pining " in **560a.**
—, — — rickets in **513a.**
—, helminths in **99c, 114b, 136a, 414a, 526a, 672c.**
—, hookworms in **232a.**
—, hydatid in **126m.**
—, liver-fluke in **74a, 153b, 462a.**
—, Moniezia in **82a.**
—, — spp. in **31a, 117a.**
—, — *expansa* in **331a,** 390m.
—, nematodes in **151a, 160f, 247a, 270a.**
—, *Nematodirus* spp. in **33g.**
—, oesophagostomiasis in **600a.**
—, parasites in **435a.**
—, *Stilesia vittata* in **26d.**
—, stomach worm disease in **389a.**
—, — worms in **460c.**
—, *Syngamus laryngeus* in **494b.**
—, trichostrongyles in **39b, 133b, 672b.**
—, trichostrongyliasis in **540a.**
—, various anthelmintics **421a.**
Shrew, cercariae in **42c.**
Siam, Gnathostoma 95c.
Sigmodon hispidus, *Monodontus* n. sp. in **68e.**
Simulium sp., intermediary for *Onchocerca gutturosa* **460d.**
Snake, water, *Zeugorchis* n. sp. in 133f.
Snakes, cestodes in **383c.**
—, *Ophidascaris* n. sp. in **494c.**
Snipe, *Choanotaenia* n. sp. in **326a.**
—, *Cyclocoelum* 8 n. spp. in **292c.**
—, *Paricterotaenia* n. sp. in **326a.**
Sorex araneus, *Crenosoma* n. sp. in **36k.**
— —, *Porrocaecum* in **36k.**
— —, *Trichocephalus* n. sp. in **36k.**
South Africa, elephantiasis 40c.
— —, sheep hookworms **232a.**
Spain, liver-flukes **74a, 462a.**
Spatulifer spp. to *Monticella* **155f.**
Spelophallus bucephalae n. sp. in bird **383a.**

Sphaeroides testudineus, Capillaria n. sp. in **268c.**
Spheroides spadiceus, Tetrochetus n. sp. in 655a.
Sphyriocephalus viridis redescribed **77c.**
Spinicauda amarali n. sp. **494a.**
— *bufonis* n. sp. in amphibian **383g.**
— *cophotis* n. sp. **90c.**
Spinitectus mogurndae n. sp. in fish **383f.**
Spinostrongylinae n. subf. **476b.**
Spinostrongylus n. g. for *Histiostrongylus spinosus* **476b.**
Spirobolus sp., *Heth* n. sp. in **55g.**
Spirocerca sanguinolenta in dog, life-history **462b.**
— —, infection route **162c.**
Spirofilaria podicipitis n. g., n. sp. in bird **383i.**
Spironoura brevispiculata n. sp. in *Rana hexadactyla* **90c.**
— *japonensis* n. sp. in reptile **383h.**
Spirorhynchidae n. fam. **590a.**
Spirorhynchus alemniscus n. g., n. sp. in fishes **590a.**
Spirostreptus sp., *Heth* n. sp. in **55g.**
Spiroxys reviewed **390h.**
— *algericus* n. sp. for *S. contortus* **390h.**
— *contortus* to *S. algericus* n. sp. **390h.**
— — in turtle, life-history **456b.**
— *corti* n. sp. in *Rana montezumae* **85b.**
Spirura michiganensis n. sp. in *Eutamias striatus* 178f.
Spirurid larvae in *Ctenocephalides felis* **133n.**
Splenomegaly in Egypt 138d.
Stagnicola emarginata, intermediary for *Notocotylus urbanensis* **390p.**
— *palustris*, intermediary for *Fascioloides magna* **19a.**
Starling, *Syngamus trachea* in **33a.**
Statistics, mixed infections **312u.**
Stephanofilariasis in buffalo **595a.**
— in ruminants **272c.**
— — U.S.A. **435a.**
Stephanofilariidae n. fam. **160n.**
Stephanuriasis in pig 358c.
— — — in Philippines **423a.**
Stephanurus dentatus 527c.
Stichorchis giganteus in pig in Brazil **494d.**
Stictodora manilensis n. sp. in dog **284a.**
Stilesia okapi n. sp. in okapi **432b.**
— *vittata* in sheep, goat & camel in India **26d.**
Stomach worm disease in roe-deer **14a.**
— — — — sheep **389a.**
— worms, see also Trichostrongyles.
— — in pig, carbon disulphide **684e.**
— — — sheep, estimation **460c.**
Streptopelia orientalis, Hymenolepis n. sp. in **59b.**
Strigea elongata n. sp. in bird **383a.**
— *infundibuliformis* redescribed **59a.**
Strongylacantha rhinolophi n. sp. in bat **383j.**
Strongylacanthinae revised **476b.**
— to Trichostrongylidae **476b.**
Strongyle larvae in horse **725.**
— ova, bionomics **55i.**
Strongyles in horse, egg counts **706.**
— — —, incidence **228a.**
— — —, larval movement **435a.**
Strongyloides in domestic animals, control **181b.**
—, life-history 390m.
—, treatment 197a.
— spp., infective larvae **390n.**
— *akbari* n. sp. in *Crocidura cherulea* **615e.**
— *carini* n. sp. in *Leptodactylus gracilis* **631b.**
— *ratti*, single larva infections 390m.
— *simiae*, culture *in vitro* **162g.**
— *stercoralis* in dog, pathology **207a.**
— — larvae, control **453c.**
— — var. *eryxi* n. var. in *Eryx johnii* **615e.**
— — — *vulpi* n. var. in *Vulpes alopex* **615e.**
Strongyloidiasis, gentian violet **535b.**
— in goat **611a.**
— — man 463a, **589a.**
Strongylosis in horse **454c.**
— — —, treatment **454d.**
Strongyluris, key to spp. **571a.**
— *media* n. sp. in *Chamaeleon multituberculata* **571a.**
— *ornata* redescribed **571a.**
— *rubra* n. sp. in *Sceloporus undulatus* **571a.**
Strongylus vulgaris 684c.
Stylopage sp. predacious on nematodes **148a.**
Subulura interrogans n. sp. in *Caluromys philander* **409b.**
— *prosimiae* n. sp. in *Lemur fulvus* **59c.**
— *taiwanensis* n. sp. in bird **383i.**
Sudan, onchocerciasis **69c.**
Sugar-beet, *Heterodera marioni* in **552a.**
—, — *schachtii* in **127i.**
—, *Neotylenchus abulbosus* in 55c.
Sumatra, *Microfilaria malayi* **235a.**
—, nasal granuloma **311a.**
—, *Schistosoma spindale* **311a.**
Surniculus lugubris, Hymenolepis n. sp. in **59b.**
Susceptibility, see Immunity.
Swaziland, *Schistosoma haematobium* **394c.**
Switzerland, *Fasciola hepatica* **447a.**
Symbiosis, *Anguillulina* sp. & *Fergusonia* sp. **149a.**
Synalpheus brooksi, Toxocara n. sp. in **160r.**
Syngamiasis trachea in pheasant **33c.**
Syngamus laryngeus in sheep in Brazil **494b.**

Syngamus loxodontis n. sp. in African elephant **650c.**
— *merulae* in *Turdus* spp. **386a.**
— *nasicola* suppressed **494b.**
— *trachea* in fowl, mechanical treatment **184a.**
— —, garlic oil & carbon tetrachloride **33b.**
— —, life-history **125a, 522a.**
— — in starling & fowl **33a.**
— — — wild birds **386a.**

Tachygonetria expansa n. sp. in *Testudo horsfieldi* **295a.**
— *torticollis* n. sp. in *Testudo horsfieldi* **295a.**
Tadpoles, 2nd intermediaries for *Macroderoides typicus* **390f.**
Taenia laticollis valid **525b.**
— *lyncis* n. sp. in lynx **431a.**
— *pisiformis*, abnormalities **68d.**
— *saginata*, bionomics **466a.**
— —, chemistry **15a.**
— — in man, treatment 130a.
— —, multiple infections 500a.
— *scolecina* to *Paradilepis* **525b.**
— *serrata* inhibiting *Diphyllobothrium latum* in dog **465a.**
— —, " Telepathine " **204a.**
— *solium* in India **26b.**
— *taeniaeformis* in cat, immunity **312m.**
— *taxidiensis* n. sp. in lynx **431a.**
— *tenuicollis* in *Mustela vison* in Canada **155d.**
Taeniasis saginata & eosinophilia 23a.
— solium in man 575a.
Tamerlania japonica n. sp. in bird **383a.**
Taufikia to Dilepidinae **499a.**
Taxorchis schistocotyle in *Dicotyles torquatus* **390a.**
Technique for clearing nematodes **77b, 633a.**
— — collecting small nematodes **188b.**
— — concentrating helminth ova **32c.**
— — culturing hydatid **22d.**
— — Cysticercus viability **72b.**
— — detecting *Microfilaria immitis* **597a.**
— — diagnosing *Dirofilaria immitis* **276a.**
— — — hookworm disease **89a.**
— — — *Schistosoma japonicum* **20a.**
— — estimating sheep stomach worms **460c.**
—, helminthological 237a, 719.
— for staining *Microfilaria bancrofti* **175d.**
— — — plant nematodes **424c, 486a.**
— — studying *Fasciola hepatica* 641k.
— — — horse strongyle larvae **725.**
Telorchinae & Reniferinae, relationship **133k.**
Telorchis robustus in *Terrapene carolina*, life-history **55t.**
Temenuchus pagodarum, Lyperosomum n. sp. in **294c.**
Tench, *Dactylogyrus macracanthus* in 542a.
Tentacularia lepida n. sp. in fish **163a.**
Tenuiproboscis misgurni n. g., n. sp. **383d.**
Terrapene carolina, Telorchis robustus in **55t.**
Testifrondosa to Allocreadiidae **294e.**
Testudo horsfieldi, Tachygonetria 2 n. spp. in **295a.**
Tetrabothrium lari n. sp. in bird **383b.**
Tetracheilonematinae n. subf. **160n.**
Tetrameres fermini n. sp. in *Butorides virescens* **641f.**
— *microspinosa* n. sp. in *Leucophoyx thula* **641f.**
— *scolopacis* n. sp. in bird **383i.**
Tetrapetalonema marmosetae n. g., n. sp. in marmosets **69e.**
Tetrochetus hamadai n. sp. in *Spheroides spadiceus* 655a.
Thelandros baylisi n. sp. in *Uromastix hardwicki* **164b.**
— *hemidactylus* n. sp. in *Hemidactylus flavoviridis* **56a.**
— *kasauli* n. sp in *Uromastix hardwicki* **164b.**
— *taylori* n. sp. in *Uromastix hardwicki* **164b.**
Thelazia californiensis n. sp. in man **206a.**
— *chui* n. sp. in falcon **187a.**
— *tonkinensis* n. sp. in crow **187a.**
Theropithecus gelada, coenuriasis in 512a.
Thubunaea asymmetrica in *Hemidactylus flavoviridis* **56a.**
Thunnus thynnus, Bolbosoma n. sp. in **590a.**
— —, *Wedlia* spp. in **214b.**
Thynnascaris to *Contracaecum* **359a.**
Tiger lily, *Aphelenchoides* n. sp. in **160u.**
Toad, *Oswaldocruzia* n. sp. in **187a.**
Tobacco, *Heterodera marioni* in **285a, 425c.**
Tomatillo, *Aphelenchoides* n. sp. in **160u.**
Tomato, *Heterodera marioni* in **54a.**
Torrestrongylus torrei n. g., n. sp. in Chiroptera 591c.
Toxascaris leonina, infection route **55j.**
Toxicity of alkylhydroxybenzenes to man **255a, 255b, 255c, 255d, 255e**
— — anthelmintic to silver fox **24a.**
— — antimony compounds to man **11a.**
— — carbon tetrachloride to man 32a, 32b, **126a,** 567a.
— — chenopodium oil to pig **689a.**
— — Emetine to man **489a.**
Toxocara cati in cat, immunity **133v.**

Toxocara pearsei n. sp. in *Synalpheus brooksi* **160r.**
Trachinotus carolinus, Epibdella melleni in 390m.
Trachops cirrhosus, Tricholeiperia n. g., n. sp. in **476b.**
Trachurus japonicus, Rhadinorhynchus n. sp. in **590a.**
Travassostrongylus orloffi n. sp. **640e.**
— *tertius* n. sp. **640e.**
Treatment, ancylostomiasis 197b.
—, creeping eruption **451a.**
—, Dictyocaulus **512b.**
—, Dirofilaria **684f, 684j.**
—, dog Trichuris **684i.**
—, domestic animal helminths **242b,** 315a, 315b.
—, Enterobius **574a.**
—, fowl helminths **610a.**
—, helminthiasis 242a.
—, hookworm 118b, 550a.
—, — anaemia **297a.**
—, hookworms **261a.**
—, human filariasis **687a.**
—, — helminths 203a, 260a.
—, — schistosomiasis **265a.**
—, oesophagostomes 81b, 232c.
—, oesophagostomiasis **600a.**
—, *Passalurus ambiguus* **454b.**
—, ruminant helminthiasis **460a.**
—, Schistosoma 126c, **126f.**
—, schistosomiasis 508a.
—, — haematobia **459a.**
—, sheep nematodes **247a.**
—, Strongyloides 197a.
—, strongylosis **454d.**
—, *Taenia saginata* 130a.
—, trichinelliasis 557a.
—, trichostrongyles 232b.
—, trichostrongyliasis **540a.**
—, Trichuris **385b.**
Trematode cercariae in *Limnaea* spp. **129a.**
— disease 718.
— — in pigeon **629a.**
— larvae, 3 n. spp. 390m.
— ova, surface markings **154g.**
— in birds in Japan **119a, 383a.**
— — gastropods, host-list **87a.**
—, histology 390m.
— in marine fish 390m.
— — Nile valley **4d.**
— — poultry in China **606c.**
— — rat in Japan **382a.**
—, transplantation 390m.
Triaenophorus & "Pest" in pike **681a.**
— spp. in Canada **133s.**
Trichinella in animals, infectivity **175b.**
—, bionomics **133y.**
—, calcification 49b.
— in Denmark, incidence **307a.**
—, immunological diagnosis 121a.
— inspection in Germany 352a.
Trichinella larvae, bionomics **622c.**
—, larval migration **457b.**
— in man, eosinophilia **155i.**
— — —, immunological tests **465b.**
— — —, immunology **155i.**
— — —, silver salvarsan **585a.**
—, meat inspection **680a.**
— in pig, precipitin test **72d, 622a.**
—, prenatal infection **1a.**
— in rabbit, antitoxin **188a.**
— — —, calcification 390m.
— — —, haematology 390m.
— — —, immunity 390m.
— — rat, "Causyth" **176c.**
— — —, immunity **3c.**
— — —, life-history **501a.**
— — —, local immunity **673e.**
Trichinelliasis & cancer 671a.
—, control 248a.
— & haemoptysis 417a.
—, immunological tests 199a.
— in man 29a, 96a, 254a, 271a, 274a, 274b, 279a, 663a, 678a.
— — —, epidemic **443a.**
— — — in U.S.A. **384a.**
— — rat 657b.
— reviewed **318a.**
—, treatment 557a.
Trichocephalus busuluk n. sp. in *Sorex araneus* **36k.**
Trichodorinae n. subf. **160s.**
Tricholeiperia leiperi n. g., n. sp. in *Trachops cirrhosus* **476b.**
Trichonema barbatum to *T. calicatum* **87e, 688a.**
— *bidentatum* to *T. asymmetricum* **87e,** 688a.
— *sagittatum* to *T. coronatum* **87e,** 688a.
Trichonemiasis in horse, control **649a.**
Trichoneminae in horse in Poland **688a.**
Trichostrongyle larvae, ecdysis **627a.**
— —, 2nd ecdysis **155e.**
Trichostrongyles, see also stomach worms.
—, culture of larvae **127e, 127f.**
—, new, in Edentata **640e.**
— in sheep, anthelmintic **39b.**
— — —, bionomics **133b, 672b.**
—, treatment 232b.
Trichostrongyliasis in sheep, treatment **540a.**
Trichostrongylus spp., anthelmintics **99b.**
— *extenuatus* in Uruguay **497a.**
— *longispicularis* in cattle in U.S.A. 160p.
— *nagatyi* n. sp. in *Rhinchotus rufescens* **640a.**
Trichuriasis 710.
— in dog 276b.
— & hyperchlorhydria 368a.
— in man 332a.
Trichuris, anthelmintics **3b.**

Trichuris, "cell body" & *Agamermis* " stichosome " **133p.**
— in dog **534b.**
— — —, treatment **385b, 684i.**
— — man, vitamin E **264a.**
— ova, bionomics **673f.**
— *cervicaprae* n. sp. in *Antilope cervicapra* **182a.**
— ***mettami*** n. sp. in hedgehog **200a.**
— *vulpis* & *Capillaria aerophila*, eggs differentiated **87g.**
Tripius n. g. for *Asconema* & *Atractonema* **55h.**
Tripylium carcinicolum calkinsi n. var. in *Gecarcinus lateralis* **160r.**
Tristomum poeyi n. sp. in *Makaira ampla* 591a.
Triturus viridescens, *Capillaria* n. spp. in **36d.**
Trout, plerocercoids in 559a.
—, brown, *Metabronema* n. sp. in **200a.**
—, sea, *Otobothrium* n. sp. in **133i.**
Tuberose, *Heterodera marioni* in **160v.**
Tunis, *Setaria haemorrhagica* **4e.**
Turbatrix aceti in tan liquor **127j.**
Turbellaria, *Cercaria spinifera* in **468b.**
Turdus spp., *Syngamus merulae* in **368a.**
Turkey, ancylostomiasis 216a.
—, *Fasciola hepatica* **349a.**
—, fascioliasis 249a.
—, sheep & goat helminths **414a.**
Turkeys, *Ascaridia lineata* in **133g.**
—, " *Blackhead* " in **131a.**
Turnip-rape, *Heterodera schachtii* in **536a.**
Turritella communis, *Cercaria* n. spp. in **155b.**
Turtle, *Eustomos chelydrae* in **36e.**
—, *Spiroxys contortus* in **456b.**
Tylenchinema oscinellae in frit fly **9a.**
Tylenchorhynchus cylindricus to *Anguillulina dubia* **55d.**
Tylenchulus semipenetrans in 8 *Citrus* spp. in China **141a.**
Tylenchus scandens & bacteria in wheat **294a.**
Type species for 18 genera **55h.**
Typhlocoelium americanum to *T. cucumerinum* **566a.**
— *cucumerinum*, excretory system **566a.**
Tyto alba, *Neodiplostomum* n. sp. in **294c.**

U.S.A., ancylostomiasis 45a.
— — —, *Anguillulina tritici* **285b.**
— — —, *Capillaria annulata* **36h.**
— — —, *Diphyllobothrium* sp. 390m.
— — —, *Elaeophora* n. sp. **189a.**
— — —, *Gongylonema* spp. **160k.**
— — —, helminths **36p.**
— — —, *Heterodera marioni* **34a, 285a, 425c,** 530a.
— — —, hookworm **91a.**
— — —, human schistosomiasis 277a.
U.S.A., *Hymenolepis nana* 390m.
— — —, microfilariae 390m.
— — —, *Onchocerca* n. sp. **189a.**
— — —, *Oncicola canis* **385a.**
— — —, plant parasitic nematodes **286a, 286b, 609a.**
— — —, shadscale nematodes **244a.**
— — —, stephanofilariasis **435a.**
— — —, trichinelliasis **384a.**
— — —, *Trichostrongylus longispicularis* 160p.
Urocissa favirostris, *Cyclocoelum* n. sp. in **26f.**
Uromastix hardwicki, *Thelandros* n. spp. in **164b.**
Urorchis imba n. sp. in *Pseudorasbora parva* **553a.**
Urotocus fusiformis n. sp. in *Oporornis philadelphia* **36g.**
Uruguay, *Metastrongylus* spp. **497a.**
—, *Nematodirus* spp. **497a.**
—, *Trichostrongylus extenuatus* **497a.**

Vegetables transmitting helminth ova **673d.**
Vesperugo abranus, *Mesodendrium* n. sp. in **613a.**
Vetus n. g. for fossil nematodes **55e.**
Viannaia spp., bursal variations **640c.**
Viverra zibetha, *Rictularia* n. sp. in **187a.**
Viviparus malleatus, intermediary for *Echinostoma macrorchis* **382a.**
Vulpes alopex, *Strongyloides stercoralis* n. var. in **615e.**

Wedlia spp. in *Thunnus thynnus* **214b.**
West Africa, free-living nematodes **10a.**
Wheat, *Anguillulina tritici* in **39a, 285b.**
—, ear cockle **294a.**
Wilt disease in pineapple 58a.
Wolf, helminths in **581a.**
Wuchereria bancrofti in *Culex pipiens*, bionomics **107b.**
— — — eye of man **116a.**
— — — Italy 549b.
— —, life-history **312a, 606a, 606b.**
— — in Shanghai, life-history **283b, 283c.**

Xiphocaridina compressa, *Caridinicola indica* in 506e.

Yam, *Anguillulina bradys* in **127m.**
Yugoslavia, fish helminths **681a.**
—, pigeon helminthiasis 573a.

Zacco sp., *Micracanthorhynchus* n. g., n. sp. in **590a.**
Zebu, *Schistosoma spindale* in **311a.**
Zeugorchis, type redescribed 390m.
— *natricis* n. sp. in water snake 133f.
Zonitoides arboreus, intermediary for *Panopistus pricei* **52a.**
Zuidersee, free-living nematodes **302a.**

CORRIGENDA.

Serial No.	
19a	(Title) Line 3 *For* " *Fascioloides magna* " *read* " Fascioloidiasis magna "
35a	(Title) *For* " obervations " *read* " observations "
68a	(Title) *For* " MacCullum " *read* " MacCallum "
163a	(Abstract) Line 8 *For* " *Rhaphidascaris* " *read* " *Raphidascaris* "
190	(Title) *For* " L'Aguillulose " *read* " L'Anguillulose "
196b	(Title) *For* " filamente " *read* " filaments "
322a	(Title) *For* " XLVIII " *read* " XLVII "
323a	(Title) *For* " Präzpitationsreaktion " *read* " Präzipitationsreaktion "
376	(Periodical) *Between* " Batteriologia " *and* " Immunologia " *insert* " e "

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